Chesapeake Bay Critical Area Commission Mt. Calvert 16302 Mt. Calvert Road Upper Marlboro, Md 2077 October 1, 1997

AGENDA

SUBCOMMITTEES

10:00 a.m. - 11:00 a.m.

Project Evaluation

Members: Languer, Bourdon, Giese, Goodman, Corkran, Foor, Blake, Cooksey, Hearn, Deitz, Wilde, Graves, Castleberry

Pepco - Oil Containment trenches MPA Masonville, Baltimore City

Shore Erosion Control, Greenwell State Park

St. Mary's County

Regina Esslinger, Chief Project Evaluation

Dawnn McCleary, Planner

Mary Owens, Chief Program Implementation

11:00 a.m. - 12:00 p.m.

Tours: Joshua Barney's Barge

Patuxent by Barge

LUNCH &

tour of Archeological Dig near Manor House

12:30 р.т. - 1:00 р.т.

Welcome and remarks by Rich Dolesh, MNCPPC

SLIDE PRESENTATION: by Larry Coffman, Dept of Environmental Resources

Prince George's County

"Alternative Stormwater Management Techniques for Low Impact Development"

PLENARY MEETING

1:00p.m. - 1:05 p.m.

Approval of Minutes of September 3, 1997

John C. North, II, Chair

PROGRAM AMENDMENTS

1:05 p.m. - 1:25 p.m.

Refinement - Queen Anne's County

Greg Schaner, Planner

Chester - Comm. Plan Pre-mapped Growth Allocation

1:25 p.m. - 1:40 p.m.

Refinement - Queen Anne's County

Greg Schaner, Planner

Winchester Creek

Ltd. Partnership Growth Alloation

PROJECT EVALUATION

1:40 p.m. - 1:45 p.m.

Vote /Pepco - Oil Containment trenches

Regina Esslinger, Chief Project Evaluation

1:45 p.m. - 2:00 p.m.

Vote/MPA - Masonville, Baltimore City

Dawnn McCleary, Planner

2:00 p.m. - 2:10 p.m.

Vote/Shore Erosion Control -Greenwell State Park Mary Owens, Chief Program Implementation

2:10 p.m. - 2:30 p.m.

Info Susquehanna Heritage Greenway

Susan McConville, Planner

Mary Anne Skilling, Circuit Rider

2:30 p.m. - 2:45 p.m.

Old Business

John C. North, II, Chair

New Business

Chesapeake Bay Critical Area Commission People's Resource Center Crownsville, Maryland September 3, 1997

The Chesapeake Bay Critical Area Commission met at the People's Resource Center, Crownsville, Maryland. The meeting was called to order by Chairman John C. North, II with the following Members in attendance:

Barker, Philip, Harford County Blake, Russell, Worcester County Bourdon, Dave, Calvert County Castleberry, William, Department of Business and Economic Development Corkran, William, Talbot County Deitz, Mary, Department of Transportation Evans, Diane, Anne Arundel County Foor, Dr. James C., Queen Anne's County Giese, William, Jr., Dorchester County Goodman, Robert, DHCD Graves, Charles, C., Baltimore City Languer, Kathryn, Cecil County Lawrence, Louise, Department of Agriculture Shepard, Bryan for Moxley, Stephen G. Samuel, Baltimore County Myers, Andrew, Caroline County Pinto, Robert A., Jr., Somerset County Robinson, Thomas Edward, Eastern Shore Member-at-Large Taylor-Rogers, Dr. Sarah, DNR Whitson, Michael, St. Mary's Williams, Roger, Kent County Wynkoop, Samuel E., Prince George's County

The Minutes of August 6, 1997 were approved as read.

Chairman North welcomed Mr. Charles Graves, Baltimore City, and Mr. William Castleberry, Department of Business and Economic Development, both new members to the Commission.

Claudia Jones, Science Advisor, CBCAC introduced Mr. Chandler S. Robbins, world renown ornithologist from Patuxent Wildlife Research Center who gave a slide presentation on forest interior dwelling birds. Claudia stated that the Commission's first guidance paper was developed for FIDS and currently the guidance paper is being examined for revisions. Those changes will beef up the development section a little bit making it more specific, adding framework for mitigation for FIDS habitat impacts that cannot be avoided, and proposing new species to be added. Also, some timber harvesting guidelines will be included. Ms. Jones said that a draft guidance paper is expected to be presented at the October Commission meeting.

Greg Schaner, Planner, CBCAC presented for concurrence with the Chairman's determination of Refinement, Queen Anne's County's WBR Investments. Mr. Schaner stated that the County has submitted a petition to amend their Critical Area map changing a campground formerly designated RCA to LDA. The County Commissioners conceptually approved the mapping change pending the Critical Area Commission's

response. The County Planning Commission previously approved the proposed map changes. The mapping change was proposed due to an alleged error in the original mapping of two areas of the campground totaling 10.717 acres. The applicant has provided sufficient evidence to the County to demonstrate a mapping error has occurred. The County decided the evidence indicates that the development uncharacteristic of RCA that occurred prior to December 1, 1985 is of a nature to be consistent with LDA mapping standards and that this designation should be changed from RCA to LDA. The Commission supported the Chairman's determination.

Dawnn McCleary, Planner, CBCAC presented for VOTE, the Department of Natural Resources' King's Landing Natural Resources Management Area's Phase I of the Master Plan in Calvert County. In 1989, the Commission approved the conceptional master plan for King's Landing with conditions. The plan included resource analysis of the 1180 acres; concepts for management, use and resource protection, and long term visions to maintain recreational development. In 1990, DNR adopted the King's Landing Natural Resources Management Master Plan. Since 1990, DNR has acquired an additional 53 acres, leased a portion of the NRMA to Calvert County and eliminated the possibility of research-oriented site development. The 1995 Master Plan amends the 1990 Master Plan to address the new changes and on Nov. 6, 1996, the Commission approved the revised 1995 Master Plan as an amendment to the 1990 plan. Ms. McCleary described the designs for several project elements of King's Landing to include upgrading an existing entry road; the construction of a new maintenance office building and public comfort station; the installation of a new gravel parking area and pavement of an existing driveway; the construction of two picnic pavilions and gravel parking lot; and, upgrading of an existing public swimming pool. Kay Langner moved to approve the King's Landing project as presented. The motion was seconded by Dave Bourdon and carried unanimously.

Susan McConville, Planner, CBCAC presented for VOTE the Day's Cove Master Concept Plan proposed by the Maryland Department of Natural Resources for the Gunpowder Falls State Park in Baltimore County. Ms. McConville introduced John Wilson, Resource Planning Division of DNR who presented the details of the proposal. Mr. Wilson stated that the plan includes seven different areas that will be designed for recreational and habitat uses: day use area; sports complex area; wildlife demonstration area; education center; forest stewardship program; rubble fill; and the Jones Road area. Kay Languer moved to approve the Day's Cove Master Concept Plan as presented. The motion was seconded by Bill Corkran and carried unanimously.

Ms. McConville presented for VOTE the Day's Cove Wetlands Creation for habitat by the Maryland Department of Natural Resources in Day's Cove in Gunpowder Falls State Park adjacent to the Genstar mining operation in Baltimore County. The proposed design was described by John Wilson, DNR, that includes the creation of emergent wetland, scrub-shrub wetland and forested wetland interspersed to promote habitats for a diversity of species. Mr. Wilson described the sequence of construction proposed. He said that there are no threatened or endangered species present and there are no impacts proposed to tidal or nontidal wetlands or their Buffers. This project will be sponsored by MDE as a Programmatic mitigation project and must be approved by MDE's Mitigation and Technical Section prior to initiating construction. Kay languar moved to approve the Day's Cove Wetland Habitat Project with the condition that the sediment and erosion control plan is approved by MDE prior to construction. The motion was seconded by Bob Goodman and carried unanimously.

OLD BUSINESS

Marianne Mason, Esquire, Commission Counsel and Assistant Attorney General, DNR updated the Commission on legal matters. She said that the Shirner's have refiled in the U.S. Supreme Court for Writ of Certiaori. Their petition was rejected primarily because it was improperly prepared. She will file a Brief in opposition within 30 days and the Wicomico County attorney will probably also file something. Wicomico

Chesapeake Bay Critical Area Commission Minutes - September 3, 1997

County is a co-defendent in this case.

Ms. Mason reported that an Appeal was filed in Circuit Court in Talbot County to a decision by the Talbot County Board of Appeals that granted a variance for the construction of a very large impervious walkway in the Buffer.

She said that a written confirmation of a decision from the Wicomico Board of Appeals which granted a variance for a pool in the Buffer is forthcoming. When that arrives an Appeal will be filed in Circuit Court.

In conclusion, she said that two cases in Dorchester County were dismissed because they were resolved to the Commission's satisfaction. One involved the McCoy's variance which granted a garage in the Buffer. It turned out that the property was one sandwiched between tidal wetlands and water and was given a buffer exempt designation and did not need a variance; the second involved an impervious surface variance where the applicant, rather than pursuing an Appeal, chose to construct his project within the 15% and relinquished his variance

NEW BUSINESS

Chairman North announced that Commission member, Philip Barker, has become the Mayor of the City of Havre de Grace. The Commission congratulated Mr. Barker.

Russ Blake assured Commission members that DNR and other agencies are working very diligently to

resolve the difficulties with the pfiesteria fish kill in the Pocomoke.

There being no further business, the meeting adjourned.

Minutes submitted by: Peggy Mickler, Commission Secretary

September 24, 1997

MEMORANDUM

TO:

Chesapeake Bay Critical Area

Commission Members and Staff

FROM:

Peggy Mickler

Commission Secretary

RE:

October Commission Meeting - Itinerary

The October 1, 1997 meeting of the Chesapeake Bay Critical Area Commission will be held at Mt. Calvert, located on the Patuxent River in Prince George's County near the Jug Bay Natural Area of the Patuxent River Park, just south of Upper Marlboro. Mt. Calvert is the site of the original County seat of Prince Georges County, which was established as Charlestown in 1696. A bustling colonial town existed here until the County seat was moved up Western Branch to Upper Marlboro in 1706. A late 18th century brick Georgian manor home, Mt. Calvert, is present on the site which provides a spectacular view of the tidal wetlands of Jug Bay.

Activities for this meeting include:

- a barge tour of the Patuxent immediately after the Project Evaluation Subcommittee meeting concludes at approximately 11:00 a.m. (those not participating in this subcommittee meeting should arrive at 10:45 a.m. for the tour.)
- 2) a tour (tentative) of the Joshua Barney's Barge simultaneously with Patuxent tour.
- following the river tour and barge tour, the entourage will gather at the manor house area for LUNCH while simultaneously viewing the on-going archeological dig which has recently yielded Native American artifacts dating from 8,000 BC as well as 18th and 19th century artifacts and building foundations.
- 4) immediately following lunch, the Commission meeting will convene in Mt. Calvert house at approximately 12:30 p.m. for welcoming remarks by Rich Dolesh, MNCPPC and for a slide presentation on "Alternative Stormwater Management Techniques for Low Impact Development by Larry Coffman of Prince George's County Department of Environmental Resources.
- 5) after the slide presentation, weather permitting, we will assemble outside to continue our Commission meeting. In case of bad weather, we'll resume the meeting indoors.
- 6) last, but certainly not least, at the close of the business portion of our meeting, attendees

will drive their own vehicles along the Chesapeake Bay Critical Area Driving Tour, a 4.5 mile-long driving tour (also open for hiking and biking) which connects the MNCPPC Jug Bay Natural Area to the Maryland DNR Merkle Wildlife Sanctuary. The Critical Area Driving Tour winds through forests, fields, and wetlands and features a 1000' long timber bridge, observation towers, and educational displays along the drive. Staff from the MNCPPC and DNR will lead the tour and at selected stops discuss the design and features of this award-winning tour.

Included in this packet are directions to Mt. Calvert, the Minutes of September and the Agenda for October with support documentation.

This itinerary promises a very interesting and busy day. Please remember to bring your camera, wear appropriate footwear and bring a jacket. The Commission Chairman, Staff and I look forward to seeing you at Mt. Calvert. If you have any questions, please call me directly at 410-974-2426 or leave a message on voice mail.

Chesapeake Bay Critical Area Commission

STAFF REPORT October 1, 1997

APPLICANT:

Queen Anne's County

PROPOSAL:

Carpenned Pre-Mapped Growth Allocation Areas - Town of Chester

COMMISSION ACTION:

Concurrence

STAFF RECOMMENDATION:

Approval with conditions (see discussion below)

STAFF:

Greg Schaner

APPLICABLE LAW/

REGULATIONS:

Growth allocation: Natural Resource Law §8-1808.1 and

Critical Area Commission's Growth Allocation Policy

Refinement: Natural Resource Law §8-1809

DISCUSSION:

The County Commissioners of Queen Anne's County gave conceptual approval of changes to the County Critical Area Program which adopted pre-mapped growth allocation areas in the Chester area of Kent island. The Chairman of the Critical Area Commission has determined that this set of mapping and text changes constitute a refinement to the Critical Area Program and is seeking concurrence with that determination.

The County assisted several towns in designating areas which are pre-mapped for possible County award of growth allocation. This effort is part of a County requirement to adopt community plans for its towns. The changes include revisions to the County's Critical Area Program (see attached text) and the adoption of mapped areas eligible for growth allocation (see attached map). The pre-mapped growth allocation areas are part of the County's objectives to "concentrate growth in suitable areas, direct development to existing population centers, and streamline development review procedures". Pre-mapping does not guarantee the actual award of growth allocation for any pre-mapped site. Growth allocation requests will still be reviewed based on their compliance with the County's growth allocation requirements and the extent to which the area requiring County growth allocation is minimized. The Commission will continue to be responsible for reviewing growth allocations in these areas as amendments or refinements to the County Critical Area Program.

Commission staff recommend the following conditions of approval for this program refinement:

• The County amend the proposed Critical Area Program language to add in the following provisions from the Commission's Growth Allocation Policy (adopted October 1995):

"Identification of site features should be done in order to alert the [County and the] Critical Area Commission that habitat protection area issues could restrain future development. All Critical Area criteria must be met at the time of project development. The approval of growth allocation by the Critical Area Commission for a parcel with sensitive site features in no way indicates the Commission's concurrence that this site is suitable for maximum development. All [habitat protection areas] must be protected."

\GLS
Chester Pre-Mapped Growth Allocation Areas
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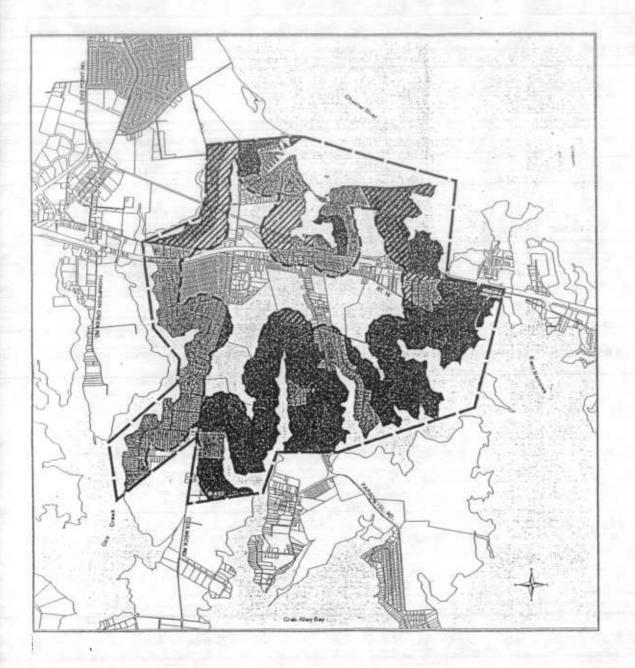
Growth Allocation and Growth Sub-Area Pre-Mapping

The following map(s) designate areas within a growth sub-area which are pre-mapped for possible County award of growth allocation. These areas are designated for future development by an adopted growth sub-area plan and either have, or are recommended to have, zoning classifications which permit development consistent with a Limited Development Area (LDA) or Intensely Developed Area (IDA) Critical Area classification.

Growth allocation is a scarce and valuable commodity of the County. Pre-mapping does not guarantee actual award of growth allocation for any pre-mapped site. Every effort should be made to sensitively design developments in pre-mapped areas to minimize the amount of needed growth allocation. The County may not grant project approvals or award growth allocation to developments which do not limit, to the extent practical, the amount of land needed for growth allocation.

The actual award of growth allocation within pre-mapped areas shall occur on a case-by-case basis as prescribed in this Program and the Queen Anne's County Chesapeake Bay Critical Area Ordinance. However, Chesapeake Bay Critical Area Commission approval of growth allocation within a pre-mapped area may be addressed as a "program refinement" instead of a "program amendment". The Critical Area Commission may not require a Commission panel hearing when approving pre-mapped growth allocation.

Pre-mapping of growth allocation in conjunction with adopted growth sub-area plans is consistent with State and County objectives to; concentrate growth in suitable areas, direct development to existing population centers and streamline development review procedures.



Chester Community Plan

Critical Area Growth Allocation Premapping

PLANNING AREA



CHESAPEAKE BAY CRITICAL AREA



RESOURCE CONSERVATION ARE



LIMITED DEVELOPMENT ARE



TENBELY DEVELOPED AREA



NON-CRITICAL AREA



PROPOSED PREMAPPED GROWTH ALLOCATION
(General Areas Eligible for Growth Allocation)

1in. = 2800



February 1997

Chesapeake Bay Critical Area Commission

STAFF REPORT October 1, 1997

APPLICANT:

Queen Anne's County

PROPOSAL:

Refinement - Growth Allocation for Winchester Creek Ltd.

Partnership Subdivision

COMMISSION ACTION:

Concurrence

STAFF RECOMMENDATION:

Approval with conditions (see discussion)

STAFF:

Greg Schaner

APPLICABLE LAW/

REGULATIONS:

Growth allocation: Natural Resource Law §8-1808.1 and

Critical Area Commission's Growth Allocation Policy

Refinement: Natural Resource Law §8-1809

DISCUSSION:

The County Commissioners of Queen Anne's County have given conceptual approval to grant growth allocation to the Winchester Creek Ltd. Partnership for a cluster subdivision in the Critical Area. The Chairman of the Critical Area Commission has determined that this mapping change is a refinement to the County's Critical Area Program and seeks concurrence with that determination.

The County Commissioners conceptually approved a development which would change 26.553 acres of RCA land to LDA. The growth allocation area will include 15 cluster lots (average lot size 1.361 acres), a 50-foot wide right-of-way, and environmental easements. The environmental easements are proposed as a means to extend the 100-foot Critical Area Buffer where possible and to protect existing wildlife habitat, woodlands and nontidal wetlands. The County's Critical Area Ordinance requires a 300-foot Buffer for growth allocation projects, however, applicants for new moderate density developments may reduce this Buffer as long as the reduction is the minimum necessary to permit practical development. The applicant intends to deed restrict all areas included in the designated environmental easement (see attached map). Additionally, because this development is considered to be a cluster subdivision, dedicated open space is required for 50 percent of the area of development. The applicant is meeting this requirement with 6.022 acres of open space within the growth allocation area and 25.692 acres of open space outside the growth allocation area.

The Department of Natural Resources' Heritage & Biodiversity Conservation Program reviewed the property for potential habitat concerns. It was determined that the property is serving as habitat for the federally endangered Delmarva fox squirrel and that adjacent areas of Winchester Creek are probably used by waterfowl. The Heritage & Biodiversity Conservation Program recommended protecting the actively used areas of fox squirrel habitat by deed restricting the open space areas to prevent timber harvesting or other disturbances. The areas which are not currently forested should be planted in mast-producing hardwood trees or be allowed to naturally reforest to provide expanded habitat for fox squirrels and other wildlife. Recommendations for protecting the waterfowl habitat included a time-of-year prohibition on any construction of water-dependent facilities between October and March of any year.

Commission staff recommend the following conditions of approval for this program refinement:

- (1) The applicant will adopt easement restrictions which permanently protect the designated easement area in the same way as the 100-foot Buffer.
- (2) The applicant will adopt easement restrictions for this site which protect and enhance the existing habitat for the federally endangered Delmarva fox squirrel and which are approved by the Department of Natural Resources' Heritage & Biodiversity Conservation Program.
- (3) The applicant will prohibit the construction of the proposed community pier and any other water-dependent facility on this site between October March of any year to protect waterfowl habitat.
- (4) The applicant agrees to enhance unforested areas of the 100-foot Buffer and environmental easement with planted native forest species or to allow these areas to naturally regenerate.

\GLS
Winchester Creek Limited Partnership - Growth Allocation
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Chesapeake Bay Critical Area Commission app roved

STAFF REPORT October 1, 1997

APPLICANT:

PEPCO

PROPOSAL:

Chalk Point Power Plant oil containment trenches

COMMISSION ACTION:

Vote

STAFF RECOMMENDATION:

Approval

STAFF:

Regina Esslinger

APPLICABLE LAW/

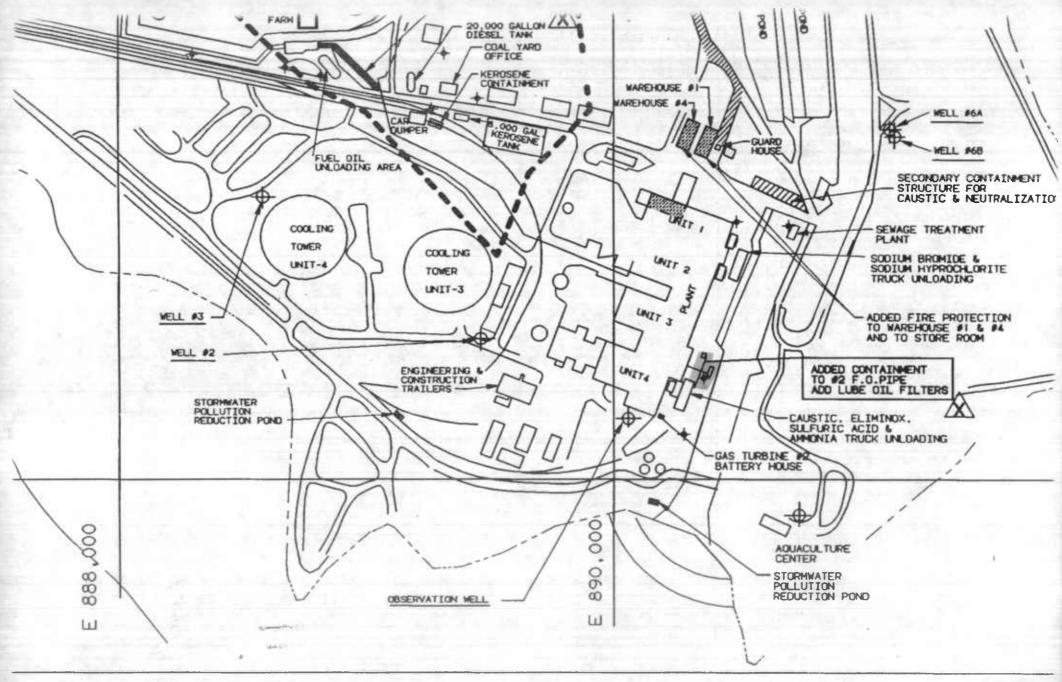
REGULATIONS:

COMAR 27.02.05 State Agency Actions Resulting in

Development on State-Owned Land

DISCUSSION:

This project is reviewed under an MOU between Prince George's County, PEPCO, and the Commission. PEPCO is proposing to install two oil containment trenches under the existing oil piping associated with two combustion turbines at the Chalk Point Power Plant. The purpose of the project is to provide for containment in the event of an oil spill and thus reduce potential contamination of Swanson Creek. The site is designated intensely developed and is within the 100-foot Buffer. Total proposed disturbance is 1200 square feet. All but 150 square feet is existing impervious surface. The increase in impervious surface is accommodated under PEPCO's previously approved 10% Pollution Reduction Plan. Prince George's County has reviewed this proposal and has no comments. Because of the small size of the project, no permits are required from MDE.



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CHESAPEAKE BAY CRITICAL AREA COMMISSION

STAFF REPORT October 1, 1997

APPLICANT:

Maryland Department of Transportation: Maryland Port

Administration

PROPOSAL:

Masonville Marine Terminal Automobile

Truck Facility

COMMISSION ACTION:

Vote

STAFF

RECOMMENDATION:

Approval

STAFF:

Dawnn McCleary

APPLICABLE LAW\

REGULATION:

Chapter 5: State Agency Actions Resulting in

Development COMAR 27.02.05.02 on State-Owned Lands

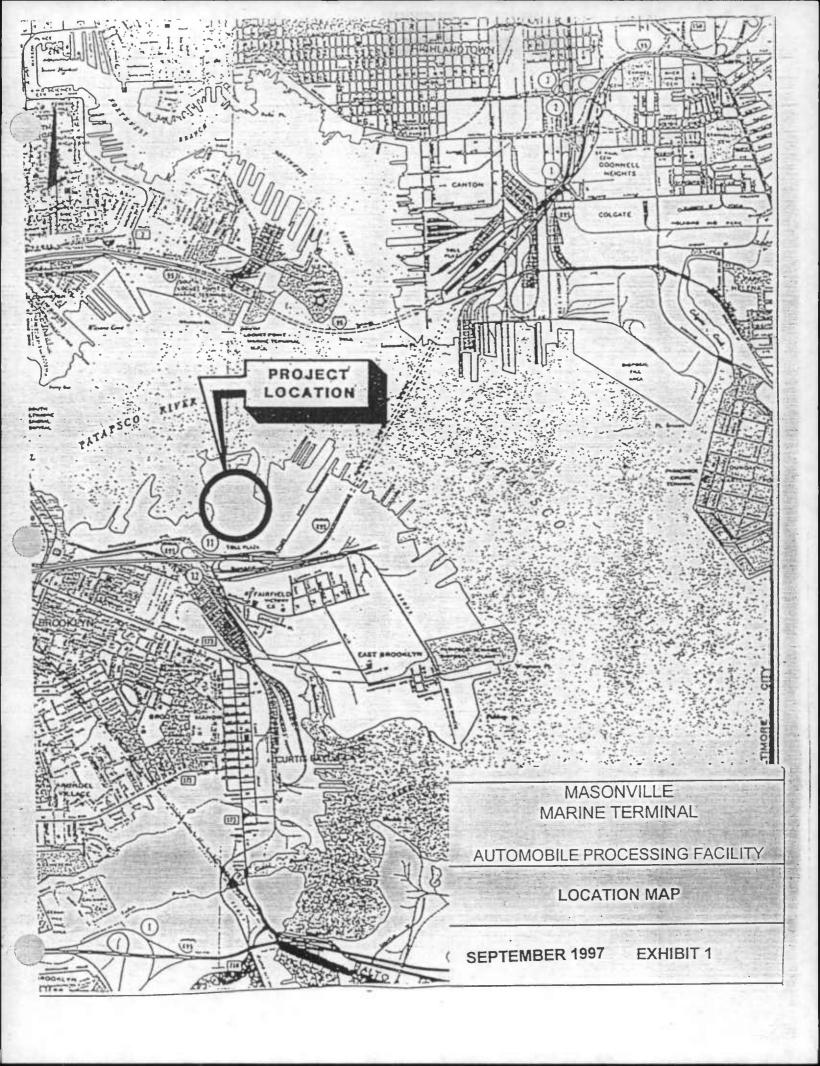
DISCUSSION:

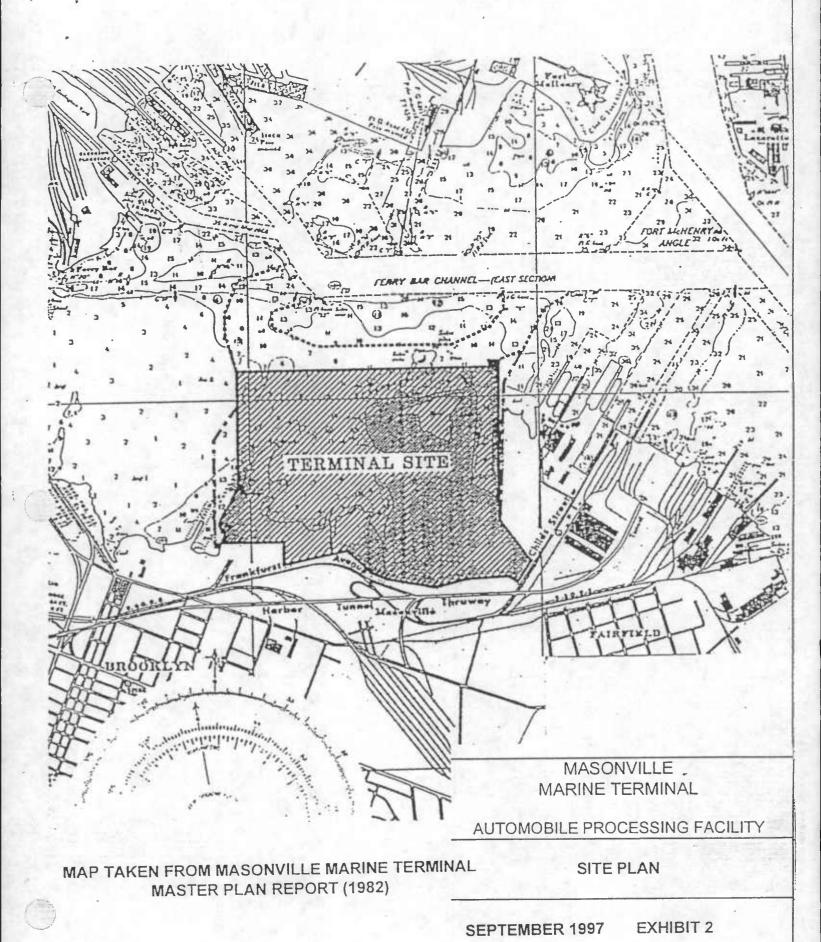
The Masonville Marine Terminal is located on the Patapsco River near Frankfurst Ave and Child Street in the Fairfield area of *Baltimore City*. The site remains the last large parcel of vacant land with the potential to become a major marine terminal. An 8.6 acre parking lot in the southeastern quadrant of the site has been constructed on a portion of the 50-acre facility and is presently being used as overflow automobile storage. This parking lot development within the Critical Area was approved by the Critical Area Commission in May 1992. The Maryland Port Administration is proposing to develop an automobile storage facility which will be located on the southern portion of the 178-acre parcel known as Masonville. The site will have vehicular access from Frank Childs Street and Childs Street. Immediately north of the I-895 Harbor Tunnel toll plaza.

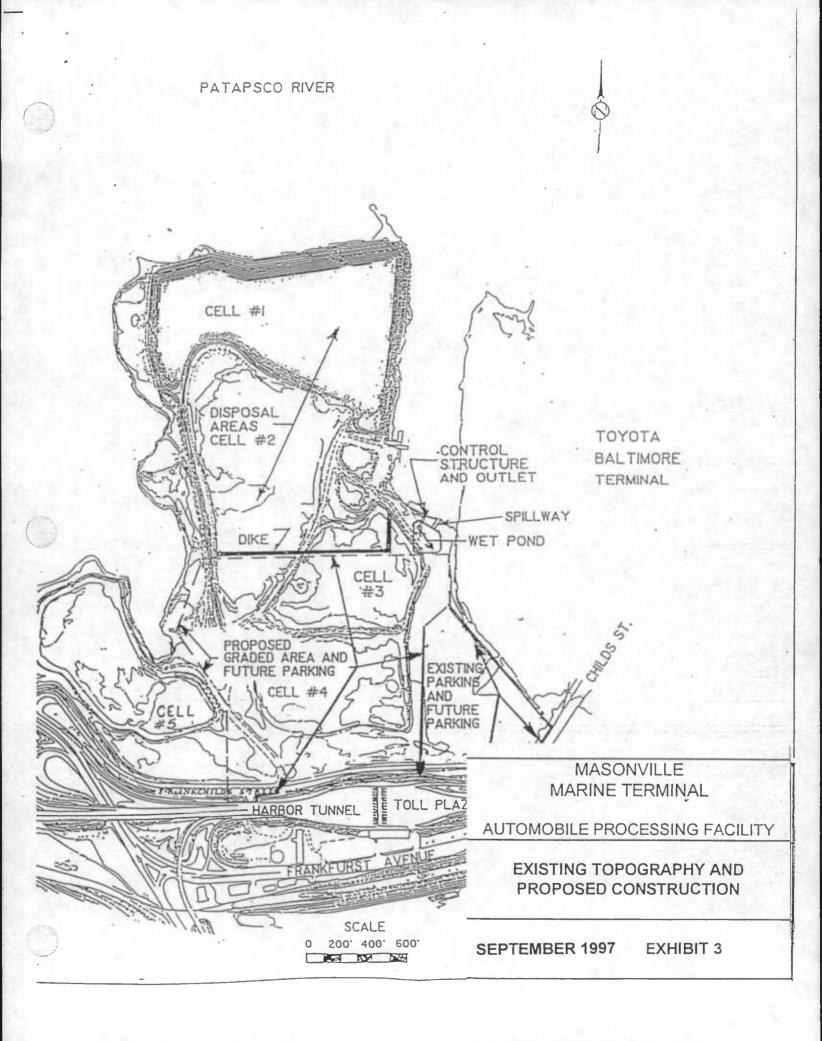
Page Two
Staff Report
Masonville Marine Terminal
Automobile\Truck Facility
October 1, 1997

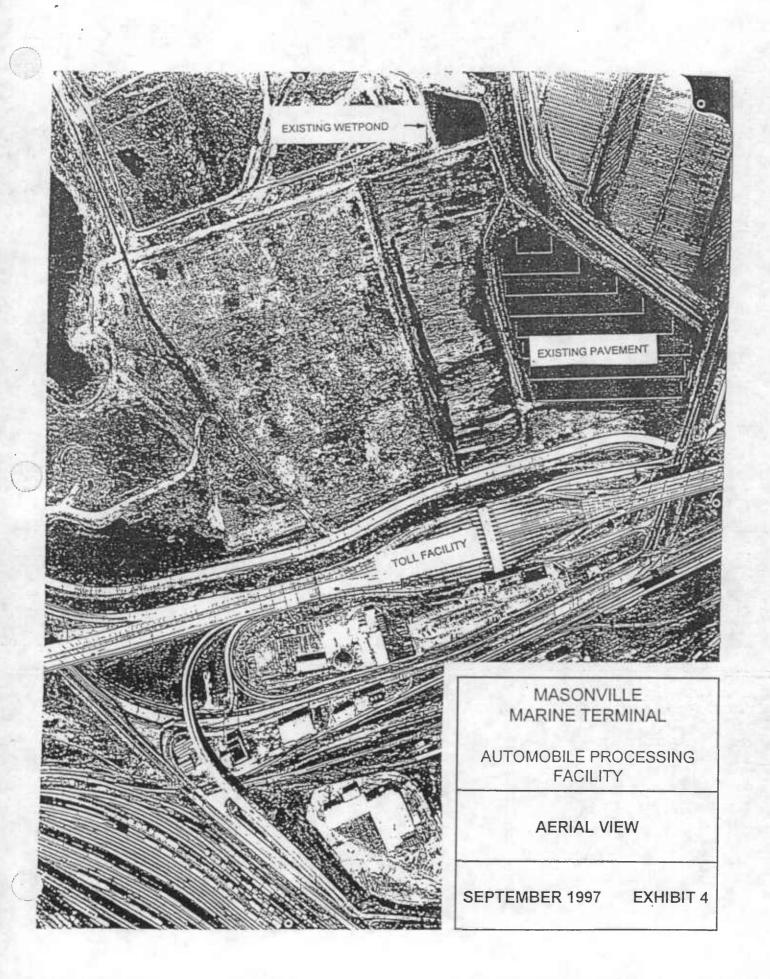
The existing land cover of the site is comprised primarily of non-forested uplands due to the past use of the site for dredged material placement. There are vegetated uplands which are located within the 100-foot Critical Area Buffer adjacent to the tidal waters of the Patapsco River. 36.55 acres of the proposed development lie within the Critical Area. The entire site lies within an Intensely Developed Area. The 1,000-foot Critical Area boundary for the site is mapped from the tidal waters and wetlands of the Patapsco River. There will be no disturbance to the Habitat Protection Area (HPA) in the area of the tidal cove to the west of the proposed site.

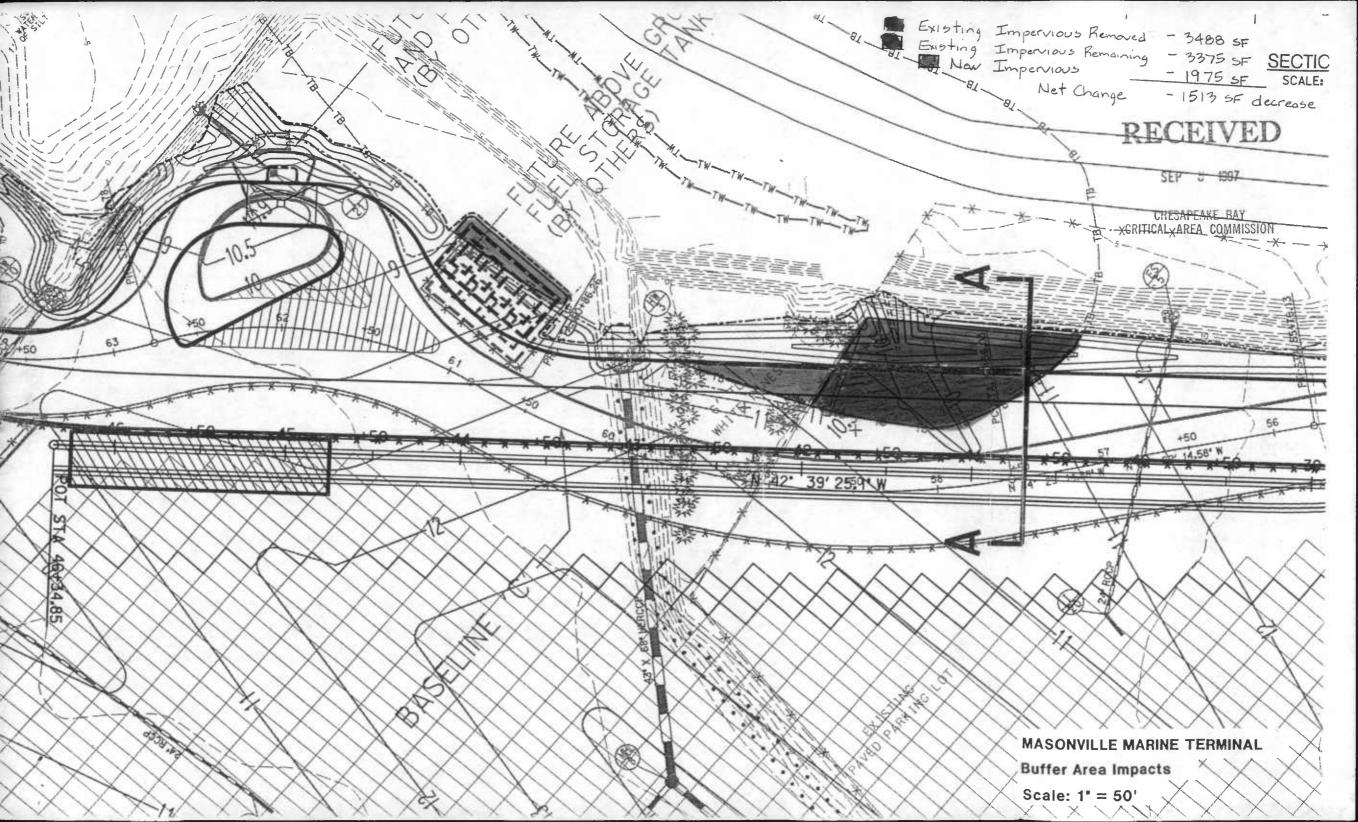
Under the proposed 1997 project, the existing slope north of the proposed Auto Processing Facility will be regraded and stabilized. The slope was constructed in the past to function as a dike between Cells 2 and 3. (See Exhibit 1-4 Site Plans) A portion of the previously developed 8.6 acre parking lot lies within the 100-foot Critical Area Buffer. Rail access for the site is proposed, and will extend over part of the parking lot. 3,488 square feet of impervious surface will be removed from the Buffer, with 1,975 square feet of new impervious surface being created. There will be 3,375 square feet of impervious surface remaining within the Buffer, resulting in a net decrease of 1,513 square feet. (See Site Plan of Buffer impacts) The applicant is proposing to mitigate on-site for all Buffer impacts.











CHESAPEAKE BAY CRITICAL AREA COMMISSION MEETING AGENDA Masonville Marine Terminal

Introduction

Project Location
Purpose and Need

Description of Proposed Action

Critical Area Boundary Land Use Compatibility - Intensely Developed Area (IDA) Rail Access Options

Environmental Considerations

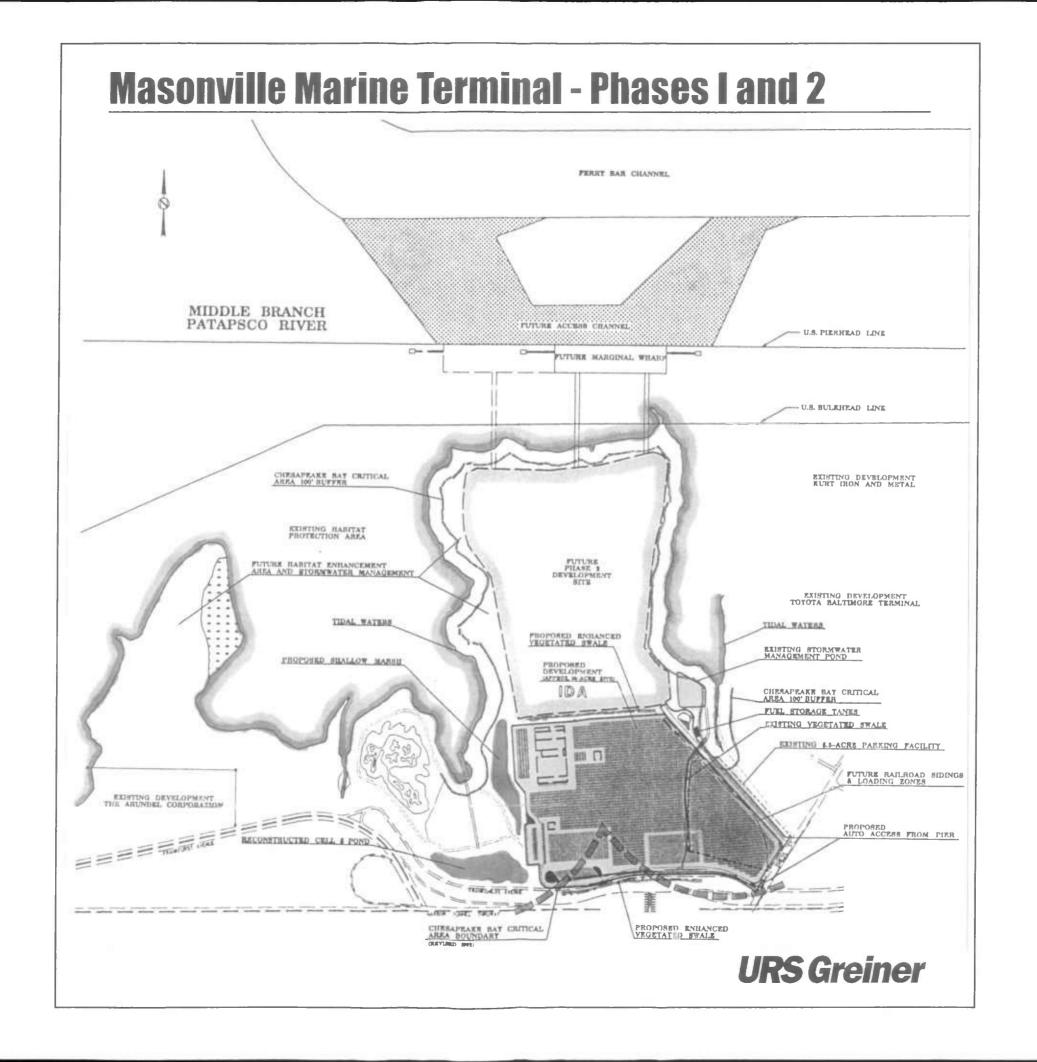
Habitat Protection Area
Non-tidal Wetlands and Buffer Impacts
Tidal Buffer Enhancements
Cell 5 Pond Reconstruction

Water Quality Improvements

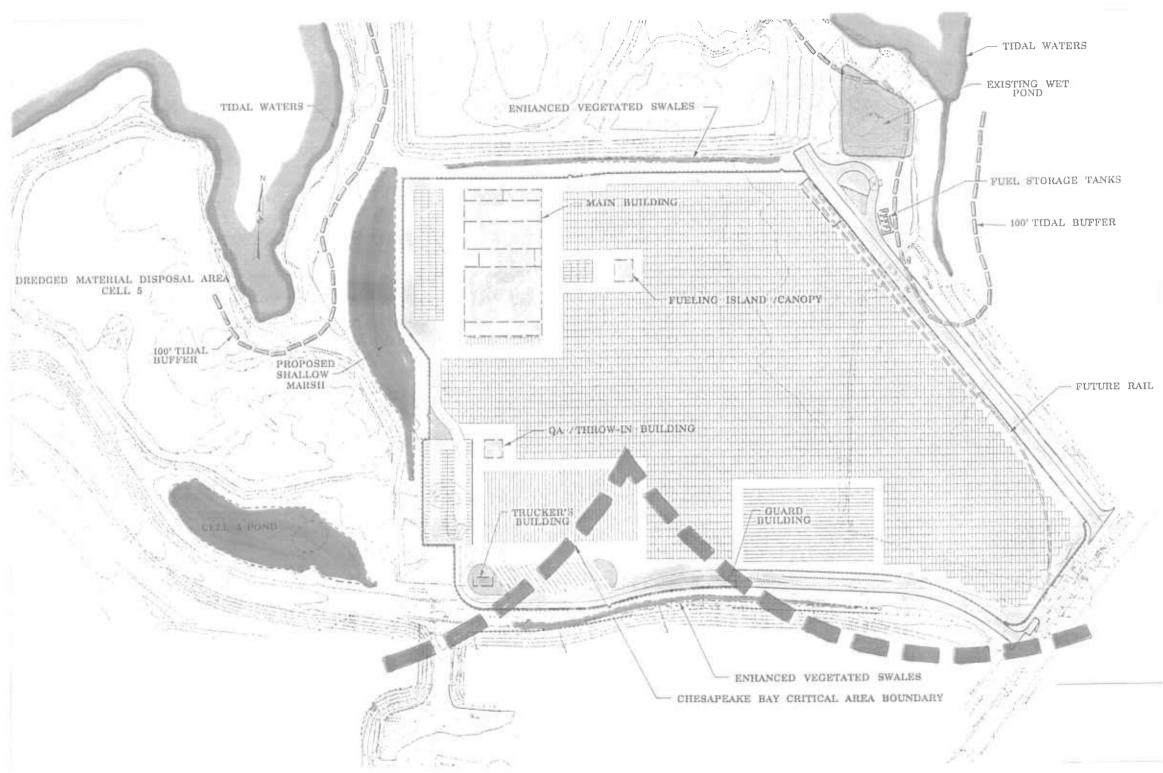
Existing Wet Pond Vegetated Swales and Shallow Marsh 10% Rule Calculations

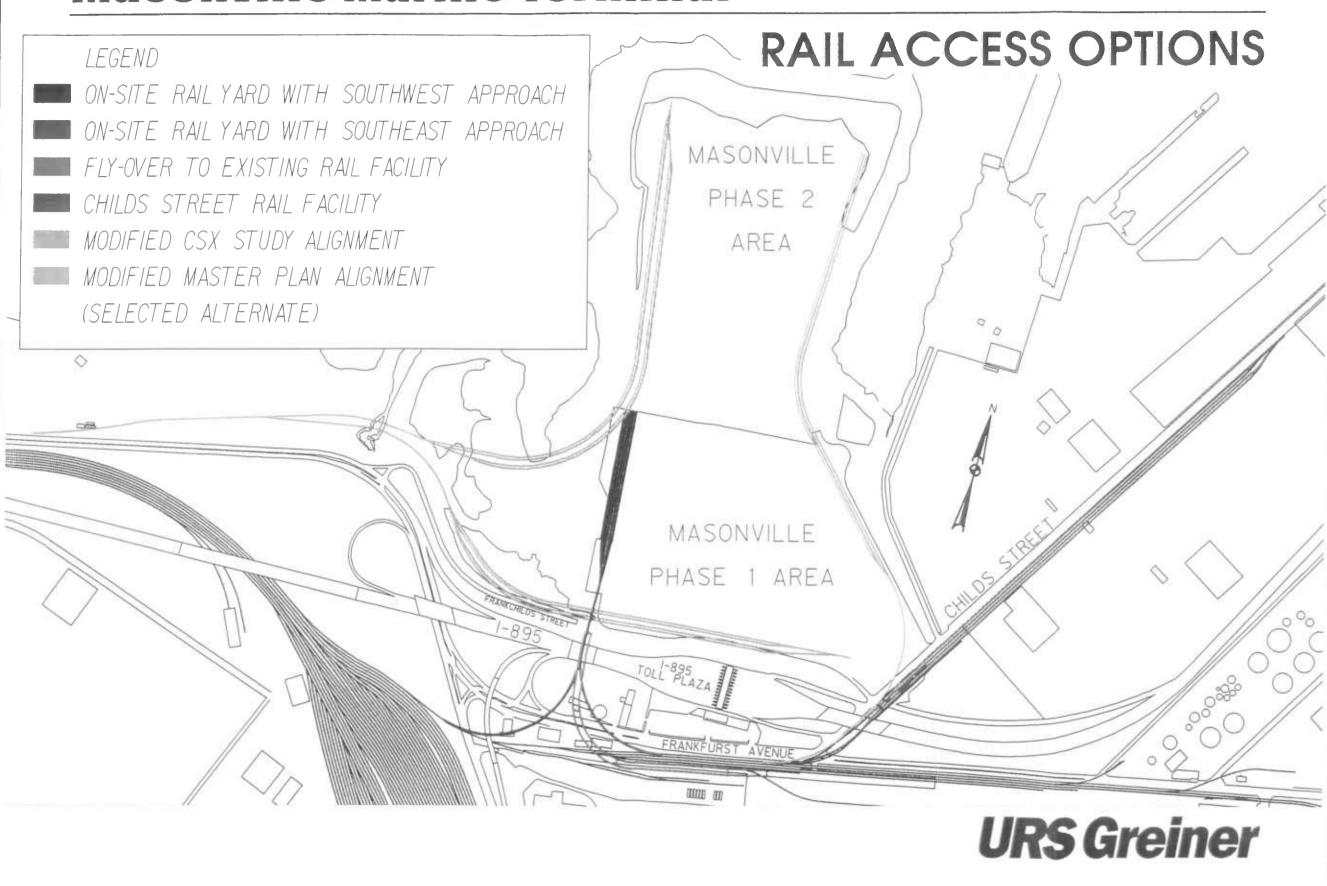
Future Phase 2

Closing Summary

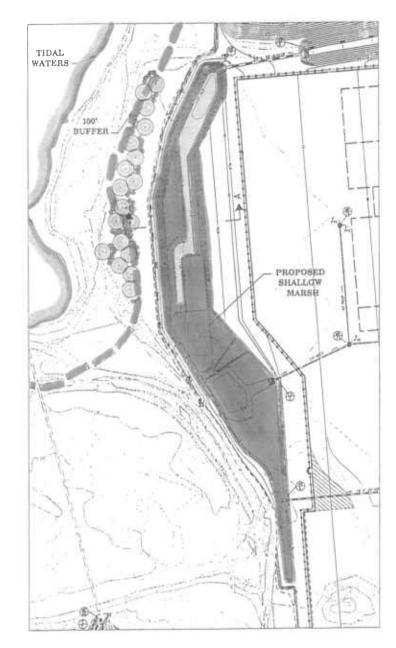


Masonville Marine Terminal - Phase I



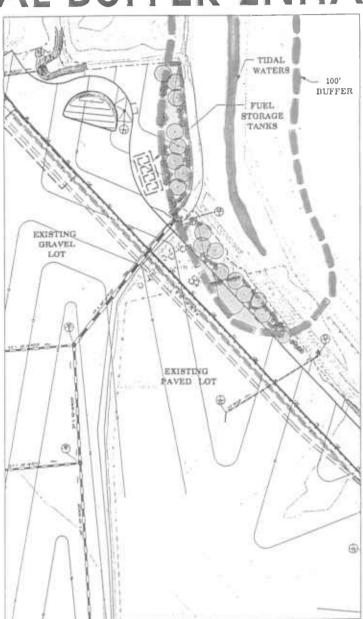


TIDAL BUFFER ENHANCEMENTS







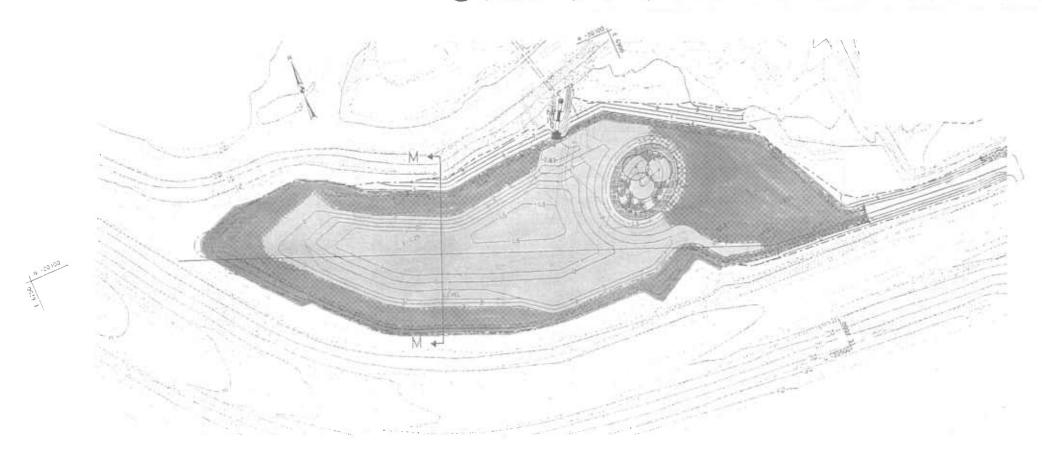


EAST SIDE PARTIAL PLAN



5,350 SSQ FT. PROPOSED IMPERVIOUS TIDAL BUFFER 10,613 SQ FT. NET REDUCTION OF IMPERVIOUS IN TIDAL BUFFER

CELL 5 POND RECONSTRUCTION

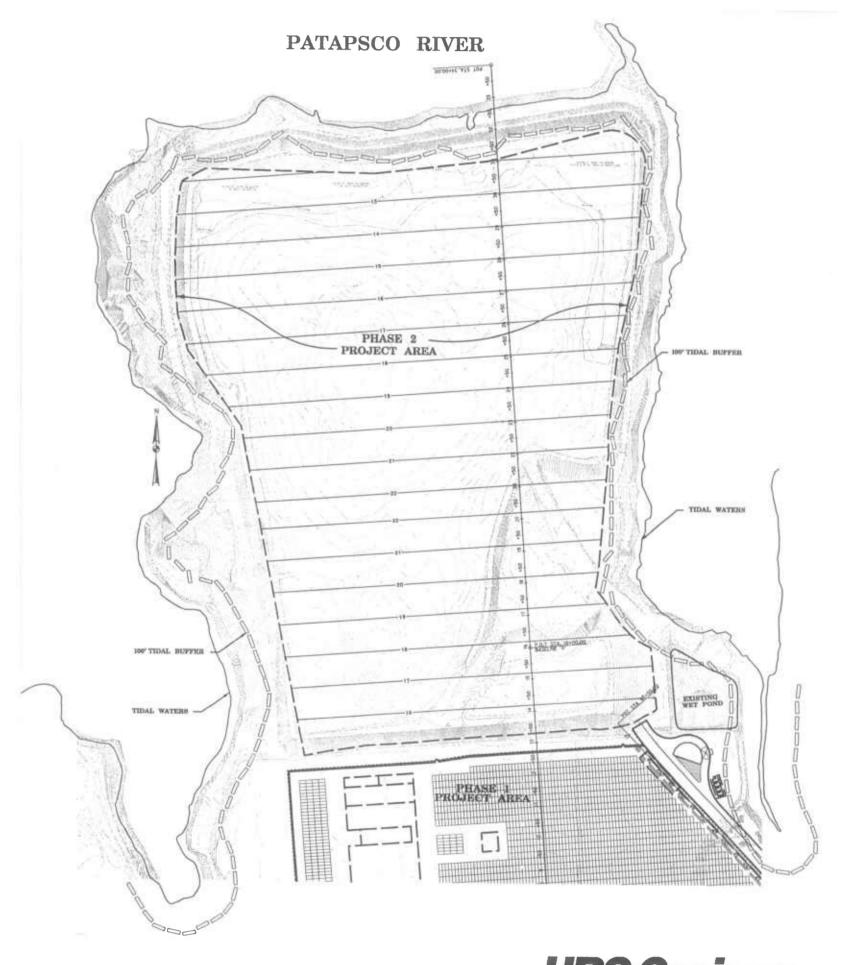


PLAN



SECTION M-M

FUTURE PHASE 2



STAFF REPORT

October 1, 1997

APPLICANT: Maryland Department of Natural Resources

Resources Management Services - Shore Erosion Control

PROPOSAL: Construction of a Stone Revetment and Stone Sill at

Greenwell State Park

JURISDICTION: St. Mary's County

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Approval

STAFF: Mary Owens

APPLICABLE LAW: COMAR 27.02.05, State Agency Actions Resulting in

Development on State-Owned Lands

DISCUSSION:

The Department of Natural Resources is proposing to construct two shore erosion control measures on Quarter Creek which is located off of the Patuxent River in Greenwell State Park. These projects are necessary to protect two points of land that are currently eroding due to their orientation relative to the broad fetch of the Patuxent River.

Site 1 involves the construction of a 135 foot long stone sill and the placement of sand fill behind the sill. This area will be planted with native marsh grasses, both spartina alterniflora and spartina patens. The sill will be located 15 to 20 feet from the existing bank. The sill structure will be approximately one foot above mean high water. Site 2 involves the construction of a 222 feet of stone revetment. Select fill will be installed at the foot of the existing bank to provide a uniform surface for the construction of the revetment which will vary in height based on the existing bank conditions. This project also involves the installation of an eight foot wide by 348 foot long gravel pathway leading to and behind the proposed revetment. The purpose of the pathway is to provide shoreline access to the handicapped and to minimize disturbance to existing forest. The shoreline access, which is located within the Buffer, was previously approved by the Commission as part of the Greenwell State Park Master Plan.

This project will involve some forest clearing (less than 5,000 square feet) in order to accommodate construction; however, all trees cleared will be replaced on a one-to-one basis. Disturbed areas will be seeded with grass to control erosion.

Greenwell State Park Page 2

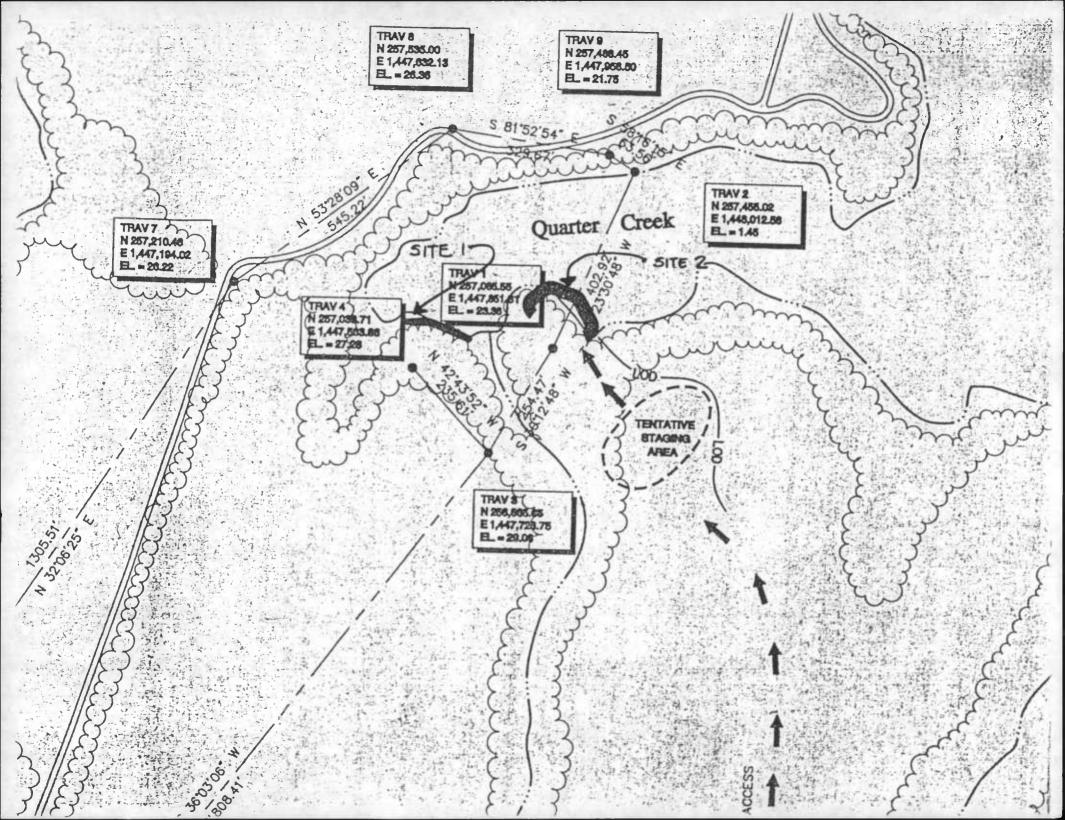
Bids on the project are currently being solicited. Construction could start as early as November 15, 1997 or as late as June 15, 1998. The project should be completed within 180 days of the start of construction.

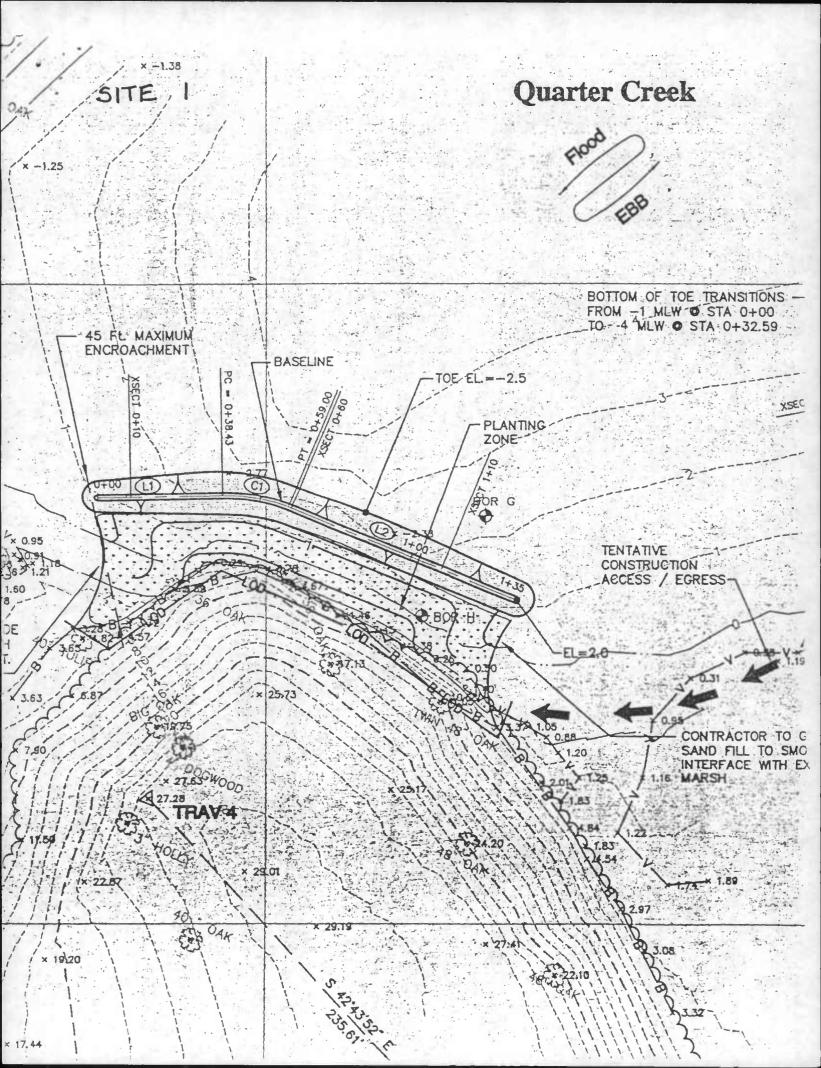
A tributary stream is located between the two sites; however, the proposed shoreline work should not impact the stream. The Department of Natural Resources has obtained the required permits from the Army Corps of Engineers and the Maryland Department of the Environment for the construction of the shore erosion control measures.

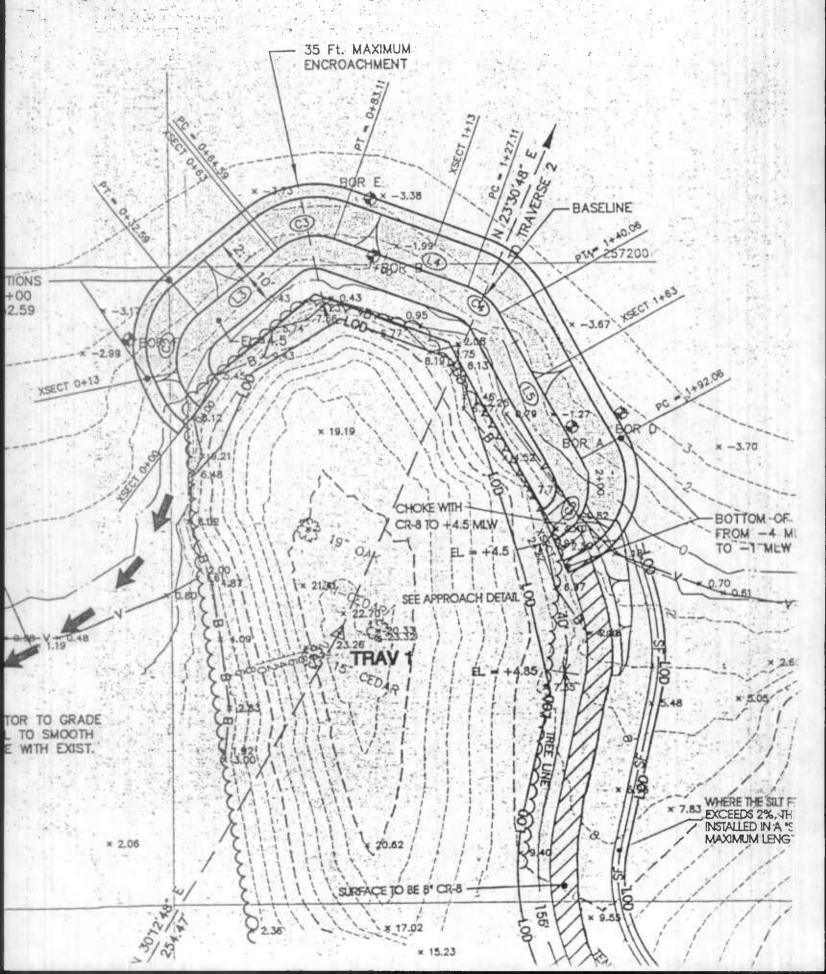
There are no known threatened or endangered plant or animal species that will be affected by the proposed construction.

Sediment and erosion control measures, approved by the Maryland Department of the Environment, will be strictly enforced to minimize potential water quality impacts.

This project is consistent with COMAR 27.02.05, the Commission's regulations for State projects on State lands.







JUDGE JOHN C. NORTH, II CHAIRMAN 410-822-9047 OR 410-974-2418 410-820-5093 FAX

> REN SEREY EXECUTIVE DIRECTOR 410-974-2418 /26 410-974-5338 FAX



WESTERN SHORE OFFICE 45 CALVERT ST., 2ND FLOOR ANNAPOLIS, MARYLAND 21401

EASTERN SHORE OFFICE 31 CREAMERY LANE EASTON, MARYLAND 21601

STATE OF MARYLAND CHESAPEAKE BAY CRITICAL AREA COMMISSION

MEMORANDUM

TO:

Chesapeake Beach Amendment Panel (Bourdon, Cooksey, Duket, Foor, Whitson)

FROM:

Mary Owens 1

RE:

Buffer Exemption

Callis Property/Tidewater Homes Project

DATE:

October 10, 1997

The local public hearing on the referenced program amendment will be held on October 16, 1997 at 6:30 p.m. at the Northeast Community Center (Room B) in Chesapeake Beach. The Northeast Community Center is located south of the Chesapeake Beach Town Hall on Route 261 (Bayside Road), next to the Water Park. The Program Subcommittee met and discussed this amendment at the Commission meeting on September 3, 1997. At that meeting, the Subcommittee Chairman, Mike Whitson, requested that Commission staff work with Town staff to assemble the following information:

- 1. Permit information for the tide gate (standard permit language excluded).
- 2. Additional information about the proposed stormwater management system and proposed discharge into the tidal wetlands.
- 3. Permit application (or information) on proposed flood plain filling.
- 4. Wetlands assessment from the Critical Area Commission staff.
- 5. Wetlands assessment from the Tidal Wetlands Division of the Maryland Department of the Environment.
- 6. Evaluation of proposed Buffer Exemption Area designation relative to the Commission's policy on Buffer Exemption Areas.
- 7. Evaluation of efforts to minimize disturbance to the Buffer and proposed mitigation (as required by the Commission's policy on Buffer Exemption Areas).

The requested information and an updated plan of the project are included for your review prior to the hearing. I apologize for the need to fax this information, but I just received some updated information from the Town today. If you have any questions, please feel free to call me at (410) 974-2426.



State of Maryland Board of Public Works

Post Office Box 1510 Annapolis, Maryland 21404 Harry Hughes
Governor

Louis L. Goldstein
Comptroller
William S. James
Treasurer
Sandra K. Reynold
Secretary

WETLANDS LICENSE NO. 87-148

TOWN OF CHESAPEAKE BEACH

This is in reference to an application for "Wetlands License," dated the 16th day of JULY, 1986. Upon the recommendation of the Wetlands

Hearing Examiner of the Board of Public Works, and pursuant to the provisions of Title 9, Natural Resources Article, Annotated Code of Maryland (1974), entitled "Wetlands and Riparian Rights," enacted to provide a State policy for the preservation of wetlands in the State, and to regulate the filling and dredging of wetlands; and for other purposes, you are hereby authorized by the Board of Public Works, for the

State of Maryland to: "emplace a 740-foot long stone revetment within a maximum of 24 feet channelward of a deteriorating timber bulkhead, and to construct a tidal floodgate across the inlet to an abandoned marina; as depicted on the plan dated September 26, 1986 - Chesapeake Bay at Town of Chesapeake Beach, Calvert County."

This license is subject to general conditions and the following special conditions:

- A. All works shall be performed in accordance with the Certification of Water Quality.
- B. All works shall be performed in accordance with the required soil erosion and sedime: control plan as approved by the Calvert Soil Conservation District.
- C. That the floodgate be maintained in the open position whenever the tide elevation is less that +2.00 feet.
- D. That the concrete base of the floodgate be armored with stone riprap.
- E. That the concrete base of the floodgate not exceed an elevation of -2.00 feet. and is to be accomplished in accordance with the plans and drawings attached hereto, dated September 26, 1986.

This license is subject to the following general conditions and is revocable or subject to modification prior to the completion of the project as described above when such action is deemed to be in the State's interest.

A judgement as to whether or not a suspension, modification or revocation is in the best interests of the State involves a consideration of the impact that any such action or the absence of any such action may have on factors affecting the public interest. Such factors include, but are not limited to: ecological, developmental water quality, economic, aesthetic, and recreational values.

General Conditions

- a. That this instrument does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State or local laws or regulations, nor does it obvizte the necessity of obtaining assent from other State or local agencies required by law for the structure or work authorized.
- b. That the structure or work authorized herein shall be in accordance with the plans and drawings attached hereto and construction shall be subject to the supervision and approval of the Water Resources Administration of the Department of Natural Resources.
- c. The licensee shall comple promptly with any lawful regulations, conditions, or instructions affecting the structure or work authorized herein if and when issued by the State Water Resources Administration, which has jurisdiction to abate or prevent water pollution. Such regulations, conditions or instructions in affect or hereafter prescribed by the State Water Resources Administration are hereby made a condition of this license.
- d. That a copy of this license and the plans and drawings attached hereto shall be available at the construction site.
- e. The licenses will maintain the work authorized herein in good condition in accordance with the approved plans.

- f. That this license may at any time be modified by the authority of the Board of Public Works, acting on its own or upon the recommendation of the Department of Natural Resources if it is determined that, under existing circumstances, modification is in the best interest of the State. The licensee, upon the receipt of a notice of modification, shall comply therewith as directed by the Board of Public Works or by its authorized representative.
- g. That this license may be suspended or revoked by the authority of the Board of Public Works if the licensee fails to comply with any of its provisions or if the Board of Public Works, upon the recommendation of the Department of Natural Resources, determines that, under exiting circumstances, such action is required in the best interest of the State.
- h. This any modification, suspension or revocation of this license shall not be the basis for a claim for damages against the State of Maryland or any arm or agency of the State.
- i. That the State of Maryland shall in no way be liable for any damage to any structure or work authorized herein which may be caused by or results from future operations undertaken by the State in furthering the interests of its citizens.
- j. That no attempt shall be made by the licensee to forbid the full and free use by the public of all navigable waters at or adjacent to the structure or work authorized by this license.
 - k. That the licensee shall notify the Water Resources Administration. Resource Protection Program by calling (301) 269-3871, at least ten (10) days in advance of the time the construction or work will be someoned.

1.	That if the structure or work authorized herein is not completed on or
before the	8th day of OCTOBER , 19 89 , this license, if not
	revoked or specifically extended, shall cease and be null and void.
	That the legal requirements of all State, Federal, and County agencies
be met.	
n.	That all provisions of this license shall be binding on any assignee or
successor	in interest of the licensee.
0.	That the licensee agrees to make every reasonable effort to prosecute
the const	ruction or work authorized herein in a manner so as to minimize any

adverse impact of the construction or work on fish, wildlife and nitural environmental."

By the authority of the Board of Public Works:

Issued for an in Behalf of the Members of the Board

values.

Acting Secretary, Board of

The terms and conditions of this license are hereby accepted.

Date 10/34/36

Signature of Licensee

Effective date: October 8, 1986



Good Crate 10/27/8-

OFFICE OF ENVIRONMENTAL PROGRAMS DEPARTMENT OF HEALTH AND MENTAL HYGIENE

201 WEST PRESTON STREET • BALTIMORE, MARYLAND • AREA CODE (301) 383-4244
HARRY HUGHES, GOVERNOR
ADELE WILZACK, R.N., M.S., SECRETARY

WATER QUALITY CERTIFICATION

		CERTIFICATION NO86_0199 NABOP86_1353	WETLANDS NO87_WI0148
		PUBLIC NOTICE DATE: 9-3-86	
ТО	•	m col l n l	RE: Emplacement of 740 feet of stone
		Town of Chesapeake Beach	revetment maximum of 24 feet channelward
		Box 458 Chesapeake Beach, MD 20732	of existing bulkhead. To include a 6 ft x 8 ft. tidal floodgate with wingwalls.
tific any any this	ation Is other a propos facility hIs cert	s required and has been sent to the Corps of Engineers. In accordance with federal sed work. The Maryland Department of Health and Mental r and its subsequent operation as noted herein will complification is issued subject to the following conditions which the following conditions with the following condi	Federal Water Pollution Control Act and Its Amendments. A copy of this certification does not relieve the applicant of responsibility for obtaining law, state law or local ordinances and does not authorize commencement of I Hygiene has determined from a review of the plans that the construction of ply with the Federal Water Pollution Control Act and its Amendments. hich are designated by an "x" in the box preceding each applicable condition:
(X)	1.	will not violate Maryland's Water Quality Standards.	an as shown in the Corps of Engineers Public Notice and in a manner which
(X)	2.	The proposed work shall be performed only after the Notification of Approval, and/or Waterway Construction issuance of a Federal Permit or Letter of Permission mits and licenses shall be a regularment(s) of the water	Issuance of a State of Maryland Wetland License, Private Wetland Permit, on Permit as required by the Maryland Water Resources Administration, and where applicable. Any requirement(s) imposed by the aforementioned per-
() (X)	3. 4.	Construction of the buildhead must be completed price	or to filling behind the bulkhead. The bulkhead must be constructed to pre- b. Only clean fill which is free of organic or metallic materials shall be used, ject shall be removed and disposed of in a manner which will prevent their
(//		entry Into the waters of this State.	
(X)	5.	The disturbance of the bottom of the water and sedi The applicant must obtain a grading and sediment cor	ment transport into the adjacent waters of this State shall be minimized.
()	6.	Soil Conservation District, and in which the applican	t certifies that the proposed work will be done according to the said plan.
()	7.	The applicant must obtain a grading and sediment continue. Division of Environmental Services, Bureau of His	ntrol plan which has been approved by the Erosion and Control Representa- ghways, Department of Public Works of the City of Baltimore, Municipal Of- must be available at the project site during all phases of construction.
()	8.	Stormwater runoff from buildings, roads, parking area of debris into the waterway. The natural vegetation s	is and other impervious surfaces shall be controlled to prevent the washing hall be maintained and restored where eroded. Other stormwater drainage
()	9.	the discharge to the waters of this State to four hur	licable, must be so constructed as to limit the suspended solids content in indred (400) parts per million or less. Turbidity procedures that incorporate etric turbidity units are considered acceptable to the Department.
()	10.	No dredolno shall be done between	
()	11.	During the construction period, all persons involved i	n the project shall use sanitary facilities and adhere to sanitary wastewater
()	12.	disposal practices as approved by the local health de The applicant shall notify this Department upon tran	spartment. sferring this ownership or responsibility for compliance with these condi- ili request transfer of the water quality certification to his name.
(X)	13.	Other. The floodgate shall be main	tained in the open position whenever the tide
			above MLW, the +2.0 ft. elevation shall be

Failure to comply with these conditions shall constitute reason for cancellation of this certification and legal proceedings may be instituted against the applicant in accordance with the Annotated Code of Maryland. In granting this water quality certification, the Department reserves the right to inspect at any time the operations and records regarding this project.

clearly depicted on a fixed portion of the tide gate.

CERTIFICATION APPROVED:

B 10/23/89



This notice of authorization must be conspicuously displayed at the site of work.

United States Army Corps of Engineers
Baltimore District

30 DEC 1986

A permit to _construct floodgate w/ wingwalls & stone revetment

In Chesapeake Bay at Chesapeake Beach, Calvert County, Md.

Address of Permittee Chesapeake Beach, Maryland 20732

Permit Number

NABOP-RW(Town of Chesapeake Beach)86↔1353-3 DONALD W. ROESEKE

Chief, Regulatory Branch

for the District Commander

(Proponent: DAEN-CWO)

Application Name & 3	NABOP-RW(Town of Chesapeake Beach)86-1353-
Effective Date	NABOP-RW(Town of Chesapeake Beach)86-1353-
Expiration Date	31 December 1989

US Army Engineer District, Baltimore Corps of Engineers P.O. Box 1715, Baltimore, MD 21203

DEPARTMENT OF THE ARMY PERMIT

Referring to written request dated	15	July	1986	for a permit	to
Kelettink to militari indoes, and					

- (X) Perform work in or affecting waters of the United States, upon the recommendation of the Chief of Engineers, pursuant to Section 10 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 403);
- (X) Discharge dredged or fill material into waters of the United States upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344);
- () Transport dredged material for the purpose of dumping it into ocean waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (86 Stat. 1052; P.L. 92-532);

Town of Chesapeake Beach Box 458 Chesapeake Beach, Maryland 20732

is hereby authorized by the Secretary of the Army:

to construct a 6 ft. wide, 8 ft. high floodgate with wingwalls. The bottom of the gate will be two feet below mean low water and six inches above the concrete pad which slopes up from the existing bottom (-4 MLW); to construct approximately 740 linear feet of stone reverment with backfill on a 2 to 1 slope, a maximum of 24 ft. channelward of the mean high water shoreline, or existing deteriorated bulkhead.

- in Chesapeake Bay
- at Chesapeake Beach, Calvert County, Maryland

in accordance with the plans and drawings attached hereto which are incorporated in and made a part of this permit (on drawings, give file number or other definite identification marks.)

TITLED: "PROPOSED FLOOD GATE & STONE REVEIMENT BLOCKS 12 & 13 - BAYCREST SUBDIVISION TOWN OF CHESAPEAKE BEACH 3RD. DISTRICT, CALVERT COUNTY, MARYLAND APPLICATION BY: TOWN OF CHESAPEAKE BEACH SHEET 1 - 3"

subject to the following conditions:

I. General Conditions:

a. That all activities identified and authorized herein shall be consistent with the terms and conditions of this permit; and that any activities not specifically identified and authorized herein shall constitute a violation of the ferms and conditions of this permit which may result in the modification, suspension, or revocation of this permit, in whole or in part, as set forth more specifically in General Conditions j or k hereto, and in the institution of the legal perceedings as the United States government may consider appropriate, whether or not this permit has

E. DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES:

- Y I. That the discharge will be carried out in conformity with the goals and objectives of the EPA Guidelines astablished pursuant to Section 404(b) of the Clean Water Act and published in 40 CFR 230;
- X 2. That the discharge will consist of suitable material free from toxic pollutants in toxic amounts.
- $\frac{X}{X}$ 3. That the fill created by the discharge will be properly maintained to prevent erosion and other non-point sources of pollution.

II. DISPOSAL OF DREDGED MATERIAL INTO OCEAN WATER:

- 1. That the disposal will be carried out in conformity with the goals, objectives, and requirements of the EPA criteria established pursuant to Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, published in 40 CFR 220-228.
- 2. That the permittee shall place a copy of this permit in a conspicuous place in the vessel to be used for the transportation and/or disposal of the dredged material as authorized herein.

III. OTHER SPECIAL CONDITIONS:

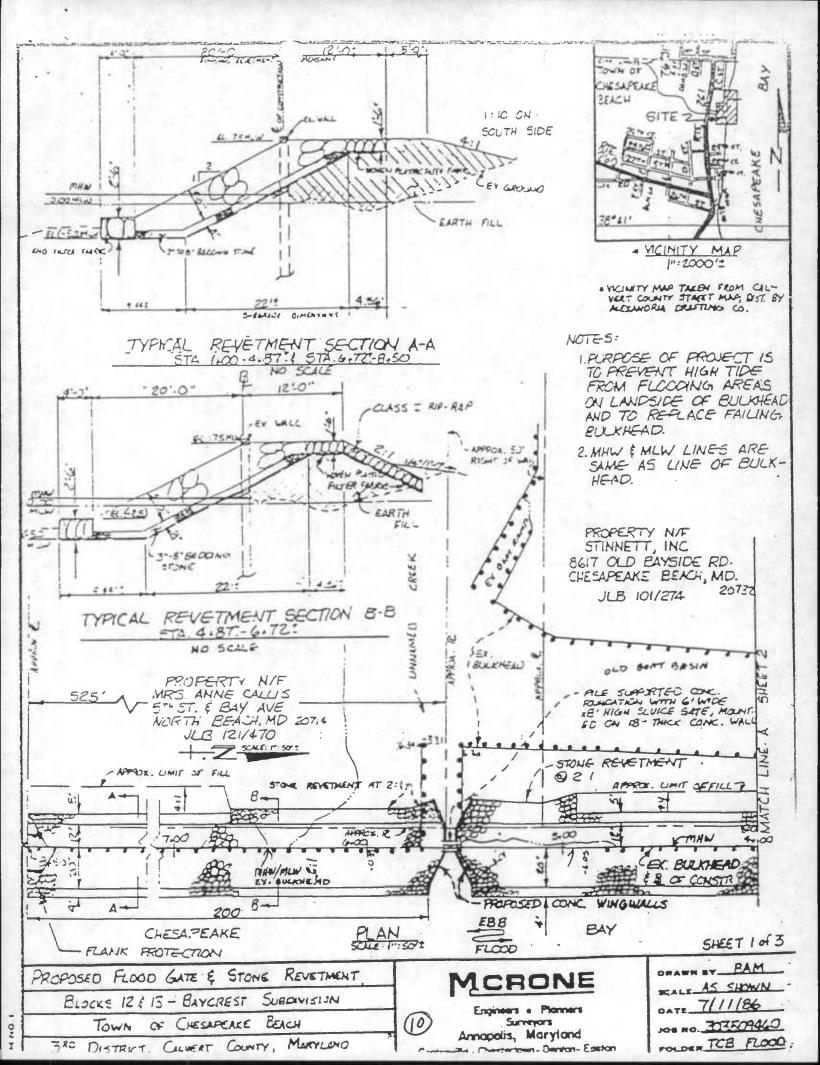
- (a) That this permit is issued subject to the conditions set forth in letter from the Environmental Protection Agency attached hereto and made part hereof.
- (b) The floodgate shall be maintained in the open position whenever the tide elevation is less than 2 ft. above mean low water. The 2 ft. elevation shall be clearly depicted on a fixed portion of the gate.

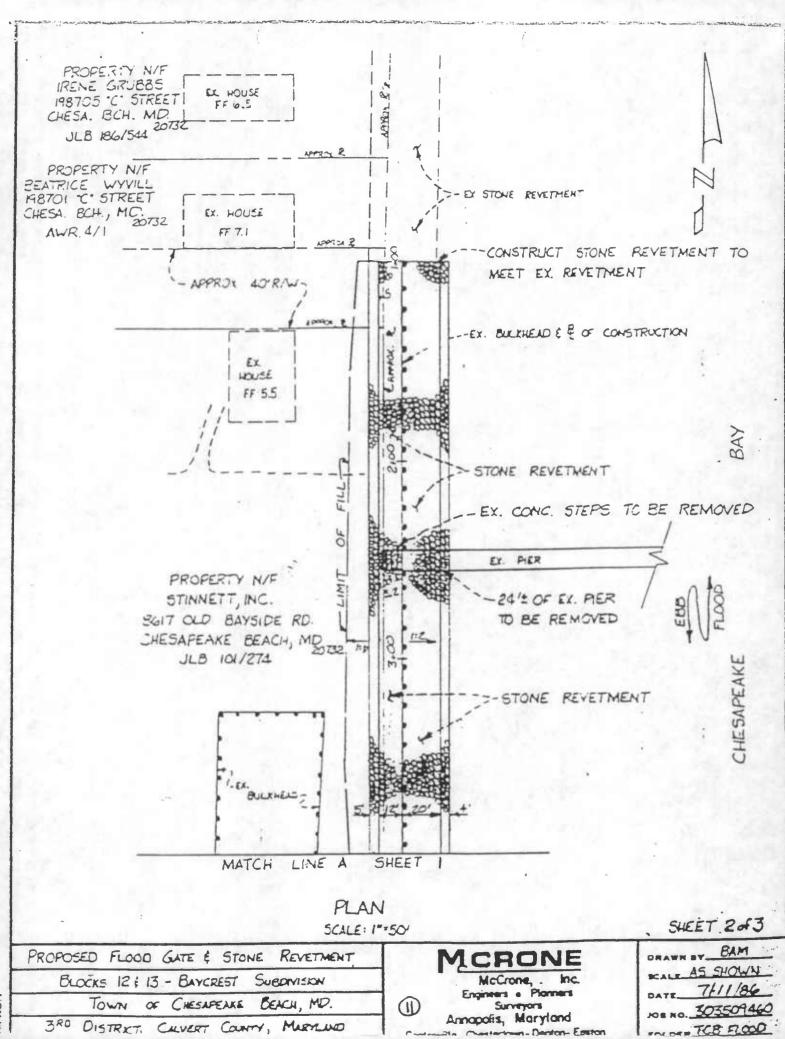
This persent shall become effective on the date of the District Engineer's signature or designee.

Transferee hereby agrees to comply with the terms and conditions of this permit.

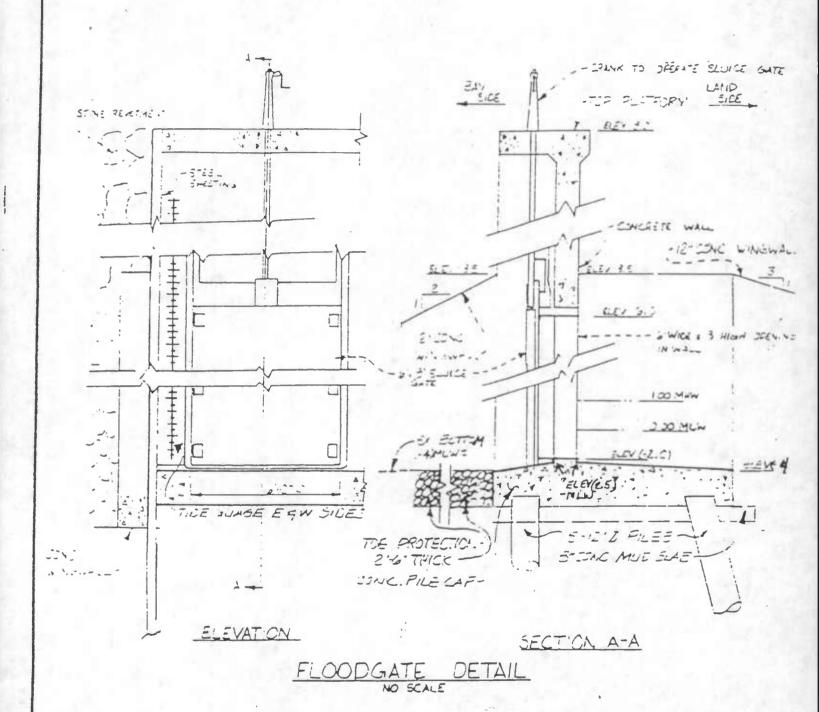
notetal inglueer

Chief, Regulatory Functions Branch





Nestertren - Denton - Esston



REUI-ED 11/17/86

SHEET 3 of 3

PROPOSED FLOOD GATE & STONE REVETMENT

BLOCK 12: 13 - BAYCREST SUEDIVISION

TOWN OF CHESAPEAKE BEACH



McCrone, Inc.
Engineers e Planners
Surveyors

Annapolis, Maryland

DRAWN BY BAM SALE AS SHOWN DATE 11/12/8/0 JOE NO. 3075084/2)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

6TH AND WALNUT STREETS PHILADELPHIA, PENNSYLVANIA 19106

STANDARD FILL CONDITIONS (NO WETLANDS)

- 1. Dredging and/or filling will be done so as to minimize disturbance of the bottom or turbidity increases in the water which tend to degrade water quality and damage aquatic life.
- 2. Deposition of dredged or excavated materials on shore, and all earthwork operations on shore will be carried out in such a way as to minimize erosion of the material and preclude its entry into the waterway.
- 3. On completion of earthwork operations, all fills on shore and other areas on shore disturbed during construction will be seeded, rip-rapped or given some other type of protection from subsequent soil erosion.
- 4. Applicant will employ measures during construction to prevent spills of fuels or lubricants. If a spill occurs, it will be controlled to prevent its entry into the waterway.



October 10, 1997

Mr. Ren Serey, Executive Director Critical Area Commission 45 Calvert St. 2nd. Floor Annapolis, Maryland 21401

RE: Buffer Exemption

Callis Property/Tidewater Project

Dear Mr. Serey.

This letter is in response to your staff's request for additional information on the proposed stormwater management system for the subject project and the need to address any fill activities on the site in light of the Town's Floodplain Ordinance.

STORM WATER MANAGEMENT

The applicant's engineer has presented a preliminary design and layout for a sand filter type system that would be installed in the parking lot area. This system will function similar to Design #14 as shown in figure 3.13 of the latest $Technical\ Guide\ for\ 10\%\ Rule\ Compliance$. This type of system is suited for this site where soils and ground water do not allow for infiltration type practices and there is insufficient upland area to develop a pond or wetland type treatment system. Because of the direct discharge to tidal waters, quantity control is not required for this site.

The present design provides that the parking lot runoff first enter a grass swale and then flow to a inlet with a sump prior to discharge to the sand filter system. Both the swale and the sump will trap solids and thereby function as a pretreament devices for the sand filter system. The owner of the property will periodically need to clean the swale and sump of trapped materials in order to protect the sand filter system.

The sand filter system will provide the pollutant removal required by the development standards for IDA property. I have reviewed the applicants design layout and have suggested some revisions to the piping layout to improve the flow pattern through the bed in order to maximize the pollutant removal benefit. My recommendation is to provide a separate outfall pipe so the beds are not connected in series and that the piping in and out of the beds not be continuous. The applicant has agreed to my suggestions and will incorporate them into the final design and detailing for the filter system prior to site plan approval.

FILLING IN THE FLOODPLAIN

Section 6.8 FILL of the Town's Floodplain Management Ordinance permits the Town to approve fill in the flood plain as long as certain requirements or standards are met. These include no fill in the

Letter to Ren Serey Re: Tidewater Project October 10, 1997 Page 2

floodway and the need to get wetland permits where fill is being placed in tidal and non-tidal wetlands. Both of these requirements are being met for the Tidewater Project. Because the fill on this project is being placed in a tidal floodplain, the impact on storage capacity is not an issue. Ultimately the fill and drainage system on this site will cure a long standing drainage problem that the Town has at the end of 30th Street on the south side of the site.

Please let me know if the above information is satisfactory and if you have any questions or need anything additional.

Very truly yours.

TOWN OF CHESAPEAKE BEACH

John A. Hofmann P. F. Town Engineer

Enclosure

pc: Mayor & Council

Ken Muller Keith Ulrich

STORMWATER MANAGEMENT 10% COMPLIANCE RULE

The proposed apartment and commercial development planned for the Callis Property lies within the Intensely Developed Area (IDA) of the Chesapeake Bay Critical Area. The critical area criteria requires that any development within the IDA be accompanied by Urban "Best Management Practices" (BMPs) to help mitigate potential water quality impacts associated with stormwater runoff. This criteria further defines that the BMPs should be capable of removing pollutant loadings from the developed site to a level of 10% below the loading generated at the site prior to proposed development. This is commonly known as the 10% Rule.

The reduction in runoff for this site is planned to be achieved by the installation of the following BMPs.

- 1. BMP #1 The installation of grassed swales within the parking area to capture 40% of the site runoff will serve as an initial system to capture pollutants from the site. The swales are designed to an 8 foot width and will be a V channel with a 0.5 foot depth. The grading of the grass island will direct flow to a yard inlet with a minimum 2.0 foot sump in the bottom of the inlet to capture sediment particles.
- 2. BMP #2 A sand filter beneath the parking area is planned to be designed to capture runoff from 50%± of the property and store a minimum of 1.5" of rainfall over the 2.0 acres of impervious area. This will serve as the secondary treatment. Runoff from this system will be piped through perforated underdrains embedded in stone wrapped in filter cloth. This will allow for the seepage of the runoff into the sand filter. After filtering through the sand the runoff will discharge into a stone blanket drain prior to discharging into the tidal wetland. The 1st and 2nd BMP should provide the removal of the oils, greases and sediments typical of parking area runoff.
- 3. BMP #3 The recreation of the shallow marsh area on-site will be proposed for final removal of pollutants from the site. The proposed marsh would serve 100% of the site drainage area and would not receive any runoff until it was treated from BMPs 1 and 2.

The BMP systems should reduce the post development loading to and above the 10% reduction requirement outlined in the Urban Stormwater Quality Guidance handbook and required in the IDA of the Chesapeake Bay Critical Area.

Note: For BMP removal rates see attached computations.

PRIELIMINARY CALCULATION

Page - 20



Worksheet A: Standa d Application Process

Calculating Pollutant Removal Requirements *

Step 1: Project Description	

A. Calculate Percent Imperviousness

4.6	
1) Site Acreage = 55 acres	d proposed, (See Table : for details)
2) Site imperviousitess, c.a.stars	L -I

	(a) Existing (acres)	(b) Post-Dev lopment (acres)
rooftop	4-1-5	0.4 AC
roads sidewalks		0,1 AC 15 AC
parking lots pools/ponds		
decks		
Imperzious		0.0

Impervious
Surface Area 2.0 Ac 2.0 Ac

B. Define Development Category (circle)

Redevelopment: Existing imperviousne
 New development: Existing imperviousne
 Single Lot Residential Single lot being deve

Existing imperviousness eater than 15% I (Go to Step 2A)

Existing imperviousness as than 15% I (Go to Step 2B)

Single lot being developed or improved; single family residuely

Single lot being develope to improved; single family residential; and more than 250 square for being disturbed. (Go to Page 27- Single Lot Residential sheet for remaining steps).

* NOTE: All acreage used in this worksheet efer to areas within the IDA of the critical area only.

Step 2: Calculate the Pre-Development oad (L pre)

A. Redevelopment

$$\begin{array}{lll} L_{pre} &= (Rv)(C)(A)S.16 \\ R, &= 0.05 \div 0.009(I_{pre}) \\ L_{pre} &= ()()()()S.16 \\ &= \underline{ } & lbs\ P/year \end{array}$$

where:

 R_v = runoff coefficient, which expresses the fraction e rainfall which is converted into sunoff.

 I_{pre} = site imperviousness (i.e., I=75 if site is 75% impervious)

C = flow-weighted mean concentration of the pollut it in urban runoff (mg/1).

C = 0.26 if pre-development I <20% C = 1.08 if pre-development I >=20%

A = area of the development site (acres in the Critical Area). 8.16 = includes regional constants and unit conversion ectors.

OR

B. New Development

$$L_{pre} = 0.5 \text{ lbs/year * A}$$

= (0.5)(5/36) 4.60
= 2/88 lbs P/year

Step 3: Calculate the Post-Development .oad (L Post)

A. New Development and Redevelopment:

$$L_{post} = (Rv)(C)(A)8.16$$

$$R_{v} = 0.05 + 0.009(I_{post})$$

$$= 0.05 + 0.009(\underbrace{2.43}) = \underbrace{0.45} = 0.45$$

$$L_{post} = (\underbrace{0.45})(1.07)(2.5)8.16$$

$$= \underbrace{17.84}$$
lbs P/year

where:

R, = runoff coefficient, which expresses the fraction of ranfall which is converted into runoff.

 I_{post} = site imperviousness (i.e., I=75 if site is 75% impervious)

C = flow-weighted mean concentration of the pollutant : urban runoff (mg/1).

C = 0.26 if pre-development I <20%

C = 1.08 if pre-development I >=20% A = area of the development site (acres).8.16 = includes regional constants and unit convection factors.

Step 4: Calculate the Pollutant Remodal Requirement (RR)

$$RR = L_{post} - (0.9)(L_{pre})$$
= (12.30) = 17.84 - (0.9)(2.30)
= 15.77 | b | P

Step 5: Identify Feasible Urban BMI

Select BMP Options using the screening tools and pollutant removal rates listed in the Applicant's Guida Tables 5.0, 5.1, 5.2, and 5.4 Calculate the load removed or each option.

1110125 3.0, 3.1, 3.2, 11	7110 01.1 01.10		Υ.		
BMP Type	(* Removal) Efficiency) x	Fraction of Drainage Area Served	(L post)	=	Load Removed
UNDER PARKING	x <u>205.v</u>	0.50	18.68	=	4.67 IL.
CHALLES WARRY	<u>0.50</u> x	1.00	18.68	=	9.39 'b:
PARICING ANCEN	0.40 X	0,40	18.68	25	# 99 lbs
	×			=	lbs
-				TOTIL	17.00 IF

If the Load Removed is equal to or greater than the pollurant removal requirement (RR) calculated in S. or 4, then the on-site BMP option complies with the 10°. Rule. (See Table 5.3, page 16) for submitted requirements for each BMP option.

CASED ON LIST / TA

^{*} Use decimal for efficiency rating. (Example: Use 0.5" for a 50% removal afficiency rating.)

WETLANDS CASE NUMBER: 97-WP-0524 TIDEWATER HOMES, INC. Chesapeake Beach, Calvert County

Prepared By Phil Mohler
Tidal Wetlands Division

WETLANDS ASSESSMENT

The applicant proposes to construct a seven story, "upscale", building with 80 apartments and with commercial units on the ground floor. The site is located on the east side of Bayside Road in Chesapeake Beach and north of 30th St. opposite the Fire House on the Chesapeake Bay. Existing, recent developments flank the site on north and south.

The 5.4 acre site contains open water tidal wetlands and vegetated tidal wetlands for a total tidal wetland area of 2.7 acres. When the site was mapped in September 1970, approximately 1.5 acres of vegetative wetlands were shown containing Spartina patens. Phragmites communis. and Spartina alternifolia on Calvert County Tidal Wetlands Boundary Map No. 50. Those wetlands were connected by a tidal ditch running parallel to Bayside Road. That ditch was connected by culverts under Bayside Road to a larger area of approximately 10 acres of vegetated tidal wetlands on the west that drained through the project site. The culverts and ditch connected to a dredged marina on the north side of the project site which had an approximate 20-foot wide opening into Chesapeake Bay.

Today, the project site's tidal connection to the Chesapeake Bay is through a tide gate which replaced the defunct marina's 20-foot opening. The gate, constructed in 1987, is not kept completely open even when high tides are not a threat to the Town. As a result, adequate tidal flushing does not occur on site or in the open waters of the adjacent, defunct marina property which is developed for housing. The lack of tidal flushing threatens the desirable species composition of the tidal wetlands west of Bayside Road which at present are of good quality.

In addition to the effects of dredge fill being apparently placed on site when the marina was dredged, aerial photos since 1938, show degradation caused by other filling and changes in natural drainage and flushing. Silt and flotsam from inadequate flushing and manmade fill have combined to highly degrade the site. As a result, the marsh elevation has been raised to form a marsh that is predominantly above the mean high water line. That marsh is now dominated by Phragmites. Sparting patens, another high marsh species, is found with the Phragmites and along the edge of the southern shoreline. Baccharis halimifolia, a woody shrub, is mixed southern shoreline. Baccharis halimifolia, a woody shrub, is mixed with some of the Phragmites. The only tidal vegetation located below with some of the mean high tide line is Sparting alterniflora which is limited to a small area that is being invaded by Phragmites.

Although beneficial for retention of sediment and flood waters (as is any marsh vegetation), <u>Phragmites</u> takes over marshes in which elevations are above the mean high water line and forms monospecific stands. The dense stands provide minimal value for waterfowl and furbearers.

The site is predominantly designated as Private Wetlands since it contains tidal wetland vegetation that does not receive tide on a daily basis. The significance of the existing marsh composition is that a marsh that was once greatly diversified in its vegetative composition and in its functions is now rapidly evolving to upland. The marsh is now predominantly functioning as a sink for runoff and has trapped the decomposed organic matter preventing the detritus and its associated nutrients from mixing with Bay waters. This deprives the Bay of its basic food source for microorganisms.

The Tidal Wetlands Division has worked closely with the applicant and his consultants and engineers to first eliminate and then to reduce the impacts associated with the proposal through avoidance and minimization. This began with a preapplication meeting and continues today. The application has been reduced from the original proposal to construct 100 units. It is now proposed to construct 80 units with a proportionate decrease in parking areas. These revised plans would result in reduced tidal wetlands impacts with 19,190 square feet of high marsh being filled and 46,009 square feet of created/improved tidal wetland mitigation on site.

with an acceptable combination of replacing all losses of wetland acreage, function and value, the Division considers the site suitable for the proposed project. The Department of Natural Resources has no records of Federal or State rare, threatened or endangered species. This provides maximum flexibility in mitigation which is now proposed at a ratio of 1:2.3. All <u>Phragmites</u> will be replaced with native tidal vegetation; nonvegetated wetlands will be replaced to tidal marsh; upland will be converted to tidal marsh, and eroding banks will be stabilized with a low profile stone sill.

stormwater best management practices, with no direct discharge overboard, will exceed the ten percent reduction rule and will result in additional water quality enhancement. Stormwater will move through grass swales to inlets under the pavement for removal of oils and greases in sand filters and then will be discharged through stone to the marsh for biological removal of nutrients.

Extensive changes in lowering the existing grade will allow the tide to move through the marsh and will help to ensure proper hydrology to the much larger marsh on the west side of Bayside Road. The creation of marsh that receives tide on a daily basis, the improved vegetative composition of other marsh and sediment control will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and value. As a will significantly increase the site's function and sediment control increases the site's function and sedime

Additional, special conditions will require the mitigation be completed prior to development of the site. Therefore, the Phragmites will be eradicated and a new, diversified tidal marsh with enhanced values and functions will be in place ahead of time. The survival rate for the planted tidal vegetation will have a required, survival rate of 85 percent survival for the first year. The minimum rate of 85 percent survival for the first year. The monitoring period for the entire tidal area will be doubled from five to ten years. Bonding will be required during that period.

As proposed, a net gain in tidal marsh and its associated values and functions will occur on a site that is locally zoned for the proposed type of development and which has water and sewer. The proposal is consistent with the Governor's "Smart Growth Initiative" to place development on previously designated sites. A severely, degraded site will be converted to one with enhanced natural resource and economic values.

CHESAPEAKE BEACH - TIDEWATER HOMES TIDAL WETLAND ASSESSMENT

Prepared by M. Claudia Jones, Science Advisor, CBCAC

Existing site conditions in relation to the tidal wetland

There are approximately 2.7 acres of tidal wetlands on this site. Nontidal wetlands exist along the west side of the property in the form of a roadside ditch. The tidal wetlands are adjacent to a tidal gut. Tidal influence on the site is controlled by a tide gate that was constructed to control flooding in the town during storm surges. The tide gate has been closed during all visits by Critical Area staff over the past several months.

The wetland is surrounded by a fringe of *Phragmites australis* on all sides except for a large area facing the tidal basin where much of the water enters the wetland. The interior of the wetland is comprised of both low and high marsh plant species representative of a salt marsh on the coastal plain.

Water Quality

This wetland provides water quality benefits by helping to trap sediments and other pollutants, and well as sequestering nutrients coming off of the site; coming from the adjacent roadway; and reaching the wetland from wet and dry atmospheric deposition. There are areas within the interior of the marsh where the tide reaches on a daily basis that are quite wet and therefore should be beneficial in terms of nutrient conversion as well as export of detritus that forms the base of the saltmarsh food chain. Most of the areas where *Phragmites* is present are very wet and should be just as effective as the more "desirable" species of wetland vegetation in terms of pollutant uptake and erosion control. This plant has quite an extensive root system and produces large amounts of biomass. Studies have shown that *Phragmites* has a relatively high value as a water purifier.

Wildlife Value

This wetland, while not large enough to provide significant habitat for large animals or those that require extensive unbroken wetlands, does provide a local refuge, and feeding area for numerous species. Numerous species of birds and other animals have been seen in and adjacent to the wetland including a sora rail which is a secretive bird that indicates that the wetland is of pretty good quality. *Spartina* wetlands have been well documented as being a major component of the estuarine food web due to the detritus (decaying organic material) that is produced and the associated invertebrate communities that are food for many organisms. In addition, *Phragmites* has been documented as providing comparable amounts of detritus to that of *Spartina* alterniflora. Phragmites is not generally utilized as a food for organisms further up the food chain nor does it provide nesting habitat for desirable waterfowl species such as Black Duck. This wetland, however, is not of sufficient size nor isolation to provide habitat for larger and more selective species.

Summary and discussion of wetland values

The existing wetland at the Tidewater Homes site is providing numerous benefits for water quality and wildlife. It is in fairly good condition considering its location and the surrounding development. The existence of *Phragmites* in this wetland has been used as part of an argument to say that this wetland is degraded and of low value; however, I would counter by saying that the existence of *Phragmites* on this site does not reduce the water quality benefits at all and does not affect the value for wildlife habitat by much. I come to the latter conclusion due to the fact that the *Phragmites* is only present around the edges of the wetland (the interior of the wetland is of good quality). A primary concern with *Phragmites* in a situation like this is that it will spread and create a monoculture that is not beneficial to most wildlife species. The wetland is being utilized by the species that would be expected in a small tidal wetland in a developed area.

It has been suggested that the existing wetland is degraded in part due to the existence of the tide gate. This is true since the natural flushing and exchange of water and organic matter as well as access by fish is precluded since the tide gate seems to be closed the majority of the time. This makes me question the wetland creation that is to occur here and wonder how it will be different. I also question what is going to keep the *Phragmites* from returning to the site. With the surrounding *Phragmites* as a seed source it will be a continuous battle.

It has also been suggested that the wetland is degraded in part because of sediment in the runoff coming from the upland portion of the site. It does not appear at this time that the upland provides much of a sediment source. It may have at one time. It appears from old aerial shots of the site that when the tidal/boat basin was dug, the spoil was placed in the adjacent wetland (the one under discussion). This area was the most likely to erode since it would have been composed primarily of loose sandy material. This disturbance also provided an opportunity for *Phragmites* to invade the site, as did the construction of the road and any other disturbance. *Phragmites* is common along the edges of many of our tidal wetlands and anywhere where disturbance exposes the soil and allows it to take hold.

Tidal wetland plant species on site

- *Phragmites australis
- *Spartina alterniflora (long and short forms)
- *Spartina patens

Spartina cynosoroides

Scirpus americanus

Hibiscus moscheutos

Baccarhis halmifolia

Iva frustescens

Disticlus spicata

Kosteletzkya virginia (seashore mallow)

Salix sp. (willow)

^{*} Dominant species

Wildlife observed on site by Critical Area staff or others include:

Kingfisher

Sora (a secretive rail that indicates that the wetland is of pretty good quality)

Great Blue Heron

Song sparrow

Fish Crow

Red-winged Blackbird

Mallard

Muskrat (a muskrat lodge was seen as well as signs of recent foraging)

Other birds and mammals that would be expected to utilize the site at some time:

Green Heron

gulls

fox

Eastern cottontail

The following fish and shellfish, etc. would be expected to use the tidal basin and benefit from the marsh provided the tidal connection is maintained:*

white perch spot bluefish menhaden killifish silverside sheepshead minnow grassshrimp

Prepared by Claudia Jones, Chesapeake Bay Critical Area Commission, September 1997.

^{*}Species list provided by National Marine Fisheries Service personnel.

CHESAPEAKE BEACH - TIDEWATER HOMES EVALUATION OF PROPOSED BUFFER EXEMPTION AREA DESIGNATION RELATIVE TO THE COMMISSION'S POLICY ON BUFFER EXEMPTION AREAS.

Prepared By Mary Owens, Chief, Program Implementation Division

The Critical Area Commission's policy on Buffer Exemption Areas states that the portions of the Buffer to be considered Buffer Exemption Areas (BEAs) are those where it can be sufficiently demonstrated that the existing pattern of residential, industrial, commercial, or recreational development in the Critical Area prevents the Buffer from fulfilling the functions set out in COMAR 27.01.09 for water quality and habitat.

Most of the areas that the Commission has reviewed and designated as Buffer Exemption Areas since the adoption of this policy have consisted of residential development on relatively small parcels. Some larger commercial properties have been designated as Buffer Exemption Areas; however, in most cases, these properties were already developed and were undergoing some form of redevelopment.

The Callis property in Chesapeake Beach is somewhat different from the "typical" properties that have been proposed by local governments for designation as a BEA. The property is a single, relatively large lot, and it is currently undeveloped. Traditionally, the evaluation of the "existing pattern of residential, industrial, commercial, or recreational development" and the evaluation of "Buffer function" have been confined to the site, lots, or parcels being proposed for BEA designation and those properties adjacent to it. In most cases, the majority of the area is developed and the BEA designation is proposed to accommodate reasonable expansion of existing structures or infill development of vacant parcels. Although, this approach has been used in the past, neither the Law or the Commission's policy defines the scope of "existing pattern of development" therefore allowing a broader interpretation.

In the case of the Callis property, the Town has requested that the panel use this broader interpretation and look at the existing pattern of residential, industrial, commercial or recreational development in the Town as a whole and how this pattern generally prevents the Buffer throughout the Town from fulfilling its functions. Because the Callis property is currently undeveloped, and natural vegetation exists within the 100-foot Buffer, it appears that the Buffer on the property is fulfilling the functions set out in COMAR 27.01.09.01. If the property were not mowed on a regular basis, it seems likely that natural succession would take place resulting in a forested Buffer. Although Buffer functions are being performed on the part of this site adjacent to the wetlands; most of the Buffer in the Town is developed with impervious surfaces and is lacking any significant vegetation. In evaluating Buffer function, Town staff has decided to look at Buffer function relative to the entire Town, and they feel that the value of a small "patch" of functioning Buffer, within the context of a heavily developed shoreline, is significantly diminished.

CHESAPEAKE BEACH - TIDEWATER HOMES EVALUATION OF EFFORTS TO MINIMIZE DISTURBANCE TO THE BUFFER AND PROPOSED MITIGATION

Prepared By Mary Owens, Chief, Program Implementation Division

Prior to presenting this project to the Critical Area Commission, the developer and his consultants evaluated several sites and determined that the proposed site was the optimum site for Bay-front mid-rise housing in a Calvert County urban area. Three conceptual site plans were developed. Plan A consisted of 100 apartment units, nine thousand square feet of commercial office space, and 236 parking spaces. Plan B consisted of 97 apartment units, five thousand square feet of commercial office space, and 230 parking spaces. Plan C consisted of 97 apartment units, five thousand square feet of commercial office space, and 230 parking spaces housed in a four story open parking garage structure. Although, impacts to the wetlands and the Buffer could be minimized with Plan C, the developer has determined that the parking garage would be prohibitively expensive to construct.

The developer determined that Plan B was the most aesthetically pleasing and economical design that met his project requirements. In working with Tidal Wetlands Division staff, Town staff, and the Critical Area Commission staff, the design of the project has been modified. The current proposal consists of 80 apartment units, ten thousand square feet of commercial office space, and 180 parking spaces.

In accordance with the Commission's policy for Buffer Exemption Areas (BEAs), new development activities will not be permitted in the Buffer Exempt Area unless the applicant can demonstrate that there is no feasible alternative and new development shall minimize the shoreward extent of intrusion into the Buffer Exempt Area. The developer feels that the plan currently being evaluated is the only feasible alternative that will meet his project requirements, and he feels that reasonable efforts have been made to reduce the scale of the project in order to minimize the area of wetland impacts. After meeting with Critical Area Commission staff last week, the developer has agreed that he would be willing to establish a 25-foot vegetated Buffer between all impervious surfaces and the new (post filling) edge of tidal wetlands.

In developing the policy on BEAs, the Commission determined that any development in a Buffer Exemption Area would require some type of Buffer mitigation, enhancement, or offsets in addition to the establishment of some type of Buffer on the site. The policy requires that "Natural vegetation of an area twice the extent of the impervious surface [in the Buffer Exempt Area] must be created in the Buffer Exemption offset area or other location as may be determined by the local jurisdiction." The Commission acknowledged that the designation of Buffer Exemption Areas, while accommodating development in the Buffer under certain circumstances, should result in an overall net increase in the area of forested Buffer within a jurisdiction or municipality.

The applicant's proposal will involve approximately 30,000 square feet of new impervious surface in the Buffer Exempt Areas adjacent to the tidal wetland and adjacent to the Chesapeake Bay. The Town does not currently have a Buffer Exemption offset area identified, and because most of the Town's waterfront is already intensely developed, the identification of a suitable site (or sites) may present a challenge. Because the required two-to-one mitigation is such a critical component of the BEA policy and will be substantial (for this project), it seems that identification of mitigation sites and the development of planting plans should be part of the amendment package that will designate this site as a BEA.

